*Appendix L

URBAN OPERATIONS

"We finally reached the front of the company where the lead APC was stopped and learned that the fire was coming from the large hotel on the left side of the street, about 50 meters to the front of the lead platoon. I guided the MK 19 HMMWV up onto a steep sidewalk so the gunner could get an effective shot and told him to watch my M16 tracer rounds and to work the building from top to bottom. I fired several tracers into the hotel; he fired a spotting round into one of the top story windows and then fired the grenade launcher on automatic, hitting every single window in the building. The effects were devastating. Concrete fragments flew everywhere, and one or two Somalis fell out of the building."

CPT Charles P. Ferry
Mogadishu, October 1993:
Personal Account of a Rifle Company XO
Infantry Magazine, Sep-Oct 94

Section I. INTRODUCTION

Urban operations (UO) are operations planned and conducted in an area of operations (AO) that includes one or more urban areas. An urban area is a topographical complex where manmade construction or high population density are the dominant features. The increasing world population and accelerated growth of cities means that UO in future conflicts will be very likely. The Infantry brigade will be the primary headquarters around which units will be task-organized to perform UO. Combat operations in urban areas usually occur when—

- The assigned objective lays within an urban area and cannot be bypassed.
- The urban area is key (or decisive) in setting and or shaping the conditions for current or future operations.
- An urban area is between two natural obstacles and there is no bypass.
- The urban area is in the path of a general advance and cannot be surrounded or bypassed.
- Political or humanitarian concerns require the control of an urban area or necessitate operations within it.
- Defending from urban areas supports a more effective overall defense or can not be avoided.
- Occupation, seizure, and control of the urban area will deny the threat control of the urban area and the ability to impose its influence on both friendly military forces and the local civilian population. Therefore, friendly forces can retain the initiative and dictate the conditions for future operations.

L-1. SPECTRUM OF OPERATIONS

The Infantry company normally conducts offensive, defensive, stability, and support (ODSS) operations as part of a task force (TF). These operations comprise the spectrum

of UO that the Infantry company must be prepared to conduct (Figure L-1). In some cases, companies may conduct stability and support operations independently. Infantry companies must plan and be prepared to conduct combat operations at all times. UO are routinely conducted against enemy forces that may be mixed in among civilians or where the civilian population density is high. Therefore, the ROE is often more restrictive than for other mission environments. How Infantry companies prepare for and execute ODSS operations is determined by the factors of METT-TC (mission, enemy, terrain, time and troops available, and civil considerations). (The ROE has significant importance within the mission and civil portions of METT-TC considerations.)

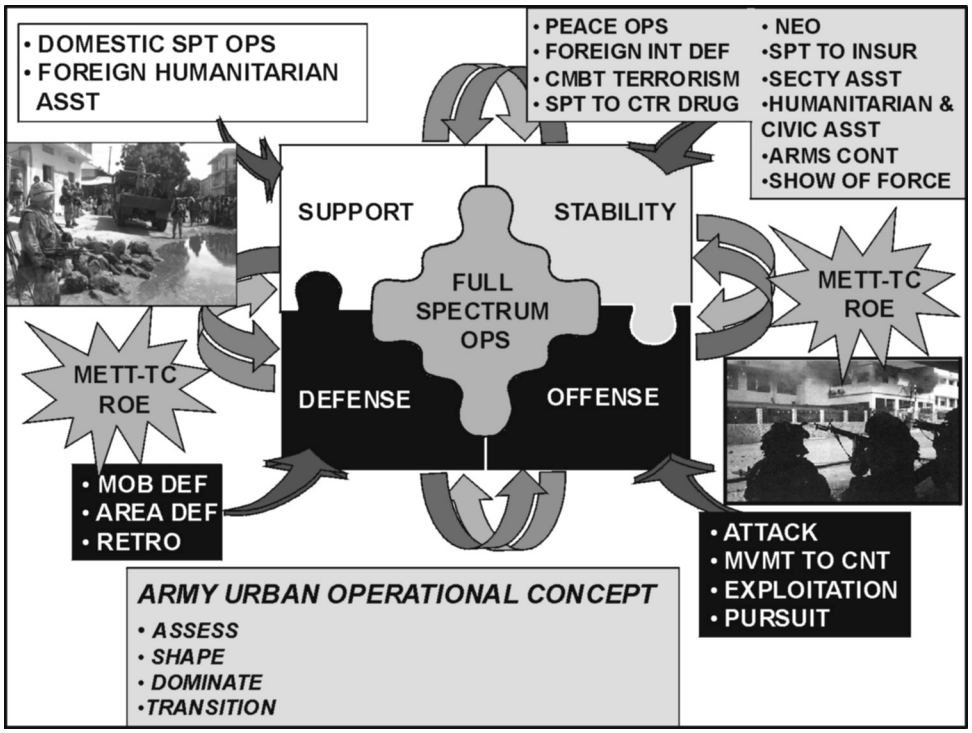

Figure L-1. UO spectrum of operations.

L-2. URBAN BATTLESPACE

Company commanders can enhance situational understanding by maintaining a clear understanding of their urban battlespace. Urban battlespace includes urban airspace, supersurface (buildings), surface (street level), and subsurface (sewers, tunnels, subways) areas. Commanders must be able to identify building types, construction materials, and building design and must understand the effectiveness and limitations of weapons against these factors. (See FM 90-10-1.) Commanders must also understand that combat under urban conditions will require them to visualize a three-dimensional battlespace. Commanders must be aware of how their urban battlespace is changing as friendly and enemy forces and civilians move, and as weather and environmental conditions change. Commanders can react to changes within the company's battlespace with the timely movement of assault, support, and breaching elements in the offense; repositioning of

platoons in the defense; and synchronization of CS and CSS assets. Other factors that impact battlespace are:

- CASEVAC and resupply procedures.
- Handling EPWs and noncombatants.
- Rules of engagement. (See paragraph L-3.)
- Weather conditions.
- Battlefield obscuration.
- Communications.
- Movement of vehicles. (How will the battlespace affect movement and target engagement?)

L-3. RULES OF ENGAGEMENT

Companies will always be faced with adhering to ROE of some kind. ROE have a significant impact on how missions are executed during UO. They must provide clear guidance to soldiers about when and how to employ force to accomplish the mission and to defend themselves.

a. The ROE will be much more restrictive under certain conditions of UO than under others. For example, a particular mission might require ROE that limit the use of indirect fire weapons. On the other hand, a mission to clear a building may require ROE that authorize force to clear rooms, and include authoritative guidance concerning measures to protect noncombatants, breach obstacles, and react to snipers.

b. One of the most significant issues of UO is collateral damage. Collateral damage is unintended and undesirable civilian personnel injuries or material damage adjacent to a target produced by the effects of friendly weapons. ROE will provide guidance concerning how to minimize collateral damage. For example, ROE may require use of nonlethal capabilities to the maximum extent possible before use of lethal weapons and munitions, or may restrict use of indirect fire weapons. The ROE will establish when certain types of weapons and munitions can be used (Table L-1).

Note: Nonlethal capability battalion kits will be in contingency stocks by September 2000 and will be issued to units on an as needed basis. Kits contain nonlethal weapons, devices, and munitions that are designed to incapacitate personnel or materiel.

c. A mission can transition quickly from stability or support to offense or defense. This transition may be caused by threat actions or the actions of noncombatants. Commanders must be prepared to react to this situation and request changes in the ROE when necessary.

d. ROE differentiate between the use of force for self-defense and for mission accomplishment. Commanders always retain the inherent authority and obligation to use necessary and proportional force for unit and individual self-defense in response to a hostile act or demonstrated hostile intent. The ROE used during Operation JUST CAUSE in Panama are shown at Table L-1.

ALL ENEMY MILITARY PERSONNEL AND VEHICLES TRANSPORTING THE ENEMY OR THEIR SUPPLIES MAY BE ENGAGED SUBJECT TO THE FOLLOWING RESTRICTIONS:
a. Armed force is the last resort. b. When possible, the enemy will be warned first and allowed to surrender. c. Armed civilians will be engaged only in self-defense. d. Civilian aircraft will not be engaged without approval from above division level unless it is in self-defense. e. Avoid harming civilians unless necessary to save US lives. If possible, try to arrange for the evacuation of civilians prior to any US attack. f. If civilians are in the area, do not use artillery, mortars, armed helicopters, AC-130s, tube- or rocket-launched weapons, or M551 main guns against known or suspected targets without the permission of a ground maneuver commander, LTC or higher (for any of these weapons). g. If civilians are in the area, all air attacks must be controlled by a FAC or FO. h. If civilians are in the area, close air support (CAS), white phosphorus, and incendiary weapons are prohibited without approval from above division level. i. If civilians are in the area, do not shoot except at known enemy locations. j. If civilians are not in the area, you can shoot at suspected enemy locations. k. Public works such as power stations, water treatment plants, dams, or other utilities may not be engaged without approval from above division level. l. Hospitals, churches, shrines, schools, museums, and any other historical or cultural site will not be engaged except in self-defense. m. All indirect fire and air attacks must be observed. n. Pilots must be briefed for each mission on the location of civilians and friendly forces. o. No booby traps. No mines except as approved by division commander. No riot control agents except with approval from above division level. p. Avoid harming civilian property unless necessary to save US lives. q. Treat all civilians and their property with respect and dignity. Before using privately owned property, check to see if any publicly owned property can substitute. No requisitioning of civilian property without permission of a company-level commander and without giving a receipt. If an ordering officer can contract for the property, then do not requisition it. No looting. Do not kick down doors unless necessary. Do not sleep in their houses. If you must sleep in privately owned buildings, have an ordering officer contract for it. r. Treat all prisoners humanely and with respect and dignity. s. Annex R to the OPLAN provides more detail. Conflicts between this card and the OPLAN should be resolved in favor of the OPLAN.
DISTRIBUTION: 1 per every trooper deployed to include all ranks.

Table L-1. ROE used during Operation JUST CAUSE.

SUPPLEMENTAL RULES OF ENGAGEMENT FOR SELECTED RECURRING OPERATIONS:
1. CONTROL OF CIVILIANS ENGAGED IN LOOTING. a. Senior person in charge may order warning shots. b. Use minimum force but not deadly force to detain looters. c. Defend Panamanian (and other) lives with minimum force including deadly force when necessary.
2. ROADBLOCKS, CHECKPOINTS AND SECURE DEFENSIVE POSITIONS. a. Mark all perimeter barriers, wires, and limits. Erect warning signs. b. Establish second positions to hastily block those fleeing. c. Senior person in charge may order warning shots to deter breach. d. Control exfiltrating civilians with minimum force necessary. e. Use force necessary to disarm exfiltrating military and paramilitary. f. Attack to disable, not destroy, all vehicles attempting to breach or flee. g. Vehicle that returns or initiates fire is hostile. Fire to destroy hostile force. h. Vehicle that persists in breach attempt is presumed hostile. Fire to destroy hostile force. i. Vehicle that persists in flight after a blocking attempt IAW instruction 2b is presumed hostile. Fire to destroy hostile force.
3. CLEARING BUILDINGS NOT KNOWN TO CONTAIN HOSTILE FORCE. a. Warn all occupants to exit. b. Senior person in charge may order warning shots to induce occupants to exit. c. Do not attack hospitals, churches, shrines, or schools, museums, and any historical or cultural sites except in self-defense. d. Respect and minimize damage to private property. e. Use minimum force necessary to control the situation and to ensure the area is free of hostile force.

Table L-1. ROE used during Operation JUST CAUSE (continued).

L-4. HANDLING NONCOMBATANTS AND DETAINED PERSONNEL

Combat in urban terrain will often involve handling noncombatants during the conduct of operations. Noncombatants may be encountered during offensive operations as a result of clearing buildings and city blocks, when preparing for defensive operations, and during stability and support operations. In all cases, the commander will have to deal with the noncombatants. Handling noncombatants can be as simple as moving them out of immediate harm's way or as complicated as noncombatant evacuation operations (NEO).

a. **Definitions.**

(1) ***Combatants.*** Combatants are uniformed enemy forces and other individuals who take an active part in the hostilities in a way that poses a direct threat to U.S. personnel.

(2) ***Noncombatants.*** Noncombatants are civilians in the area of operations who are not armed and are not taking an active part in the hostilities in a way that poses a direct threat to U.S. personnel. Noncombatants can include refugees, local inhabitants affected by combat operations, civilian personnel belonging to US governmental agencies, civilian personnel from nongovernmental organizations (NGOs), and media personnel. Military chaplains, medical personnel, prisoners of war, and the wounded and sick also are noncombatants.

(3) ***Prisoners of War (PWs).*** A prisoner of war is an individual, such as a member of the armed forces or militia, a person who accompanies the armed forces without being a

member, or other category of person defined in the Geneva Convention Relative to the Treatment of Prisoners of War, who has fallen into the power of the enemy.

(4) ***Detained Personnel.*** A detained person is any individual who is in custody for committing hostile acts against U.S. forces or committing serious criminal acts.

Note: Experience in Somalia has shown that civilians can be hostile, friendly, or neutral. Hostile civilians do not necessarily become detained personnel if they are not perceived as a threat to friendly forces. For example, political opponents of U.S. involvement may be hostile towards the U.S. military presence but do not pose a threat to U.S. forces.

b. **Considerations for Handling Civilians.** Company commanders should consider using CA, PSYOP, MPs, chaplains, and civil leaders/authorities if their mission involves handling civilians. Other considerations include the following:

(1) Carefully analyze the ROE concerning when deadly force can be used and what type of weapons may be employed (for example, using lethal as opposed to nonlethal weapons and capabilities).

(2) Do not assume that civilians will be predisposed for or against U.S. troops. Always treat civilians with dignity and respect. Use force against civilians only in self-defense or otherwise in accordance with the ROE. Detain civilians only in accordance with command directives.

(3) When conducting offensive operations, plan to move any civilians that are encountered away from firefights. Normally this task will be given to the support element after rooms and buildings have been secured. When available, PSYOP, civil affairs, and MPs can assist with this task. A covered and concealed location away from the immediate combat area should be chosen. Civilians should be controlled and not permitted to enter the immediate combat area, unless they have been cleared to do so and will not compromise combat operations, for example, media personnel or governmental or NGO personnel that have a reason and authority to enter the combat area.

(4) When conducting defensive operations, plan to move civilians away from the immediate combat area. Companies will normally escort personnel to a designated location where they will be turned over to civil authority, battalion, or higher control. In many cases, friendly or nonhostile civilians may be directed to a clearing point and allowed to go there without escort.

(5) Security is not normally provided for media or NGO personnel if they are permitted in the immediate combat area. Security requirements for civilians should be clarified at the mission briefing.

(6) Based on the factors of METT-TC, commanders may have to render some type of immediate humanitarian assistance (medical attention and feeding). If this type of assistance is necessary, clarify questions in the mission briefing. Additional Class VIII and Class I can be requested, as appropriate.

c. **Determining the Status of Personnel.** Infantry companies do not determine the status of individuals in the combat area. Any persons that are initially detained should be treated as PWs and higher headquarters should be notified with a request for assistance in evacuating these individuals.

Section II. OFFENSIVE OPERATIONS.

The brigade commander's (two levels up) primary responsibility is to set the conditions for tactical success for his subordinate units. Whenever possible, close combat by maneuver units is minimized and the brigade commander attempts to move from shaping to transition. (Figure L-2 depicts the operational framework for offensive UO. The tactical tasks of subordinate units during offensive operations are also shown in Figure L-2.) While the elements of offensive operations are not phases, tactical tasks may become phased at the company level, based on the factors of METT-TC. There is no clear line of distinction that delineates when the company moves from one task to another. Properly planned and executed offensive operations usually involve all the tactical tasks shown. They may be conducted simultaneously or sequentially, depending on the factors of METT-TC. Infantry companies will be used as maneuver elements to execute the tactical tasks. During offensive operations, the brigade commander's intent normally includes:

- Synchronizing precision fires (lethal and nonlethal effects) and information operations.
- Isolating decisive points.
- Using superior combat power to destroy high pay-off targets.
- Using close combat, when necessary, against decisive points.
- Transitioning quickly to stability/support operations.

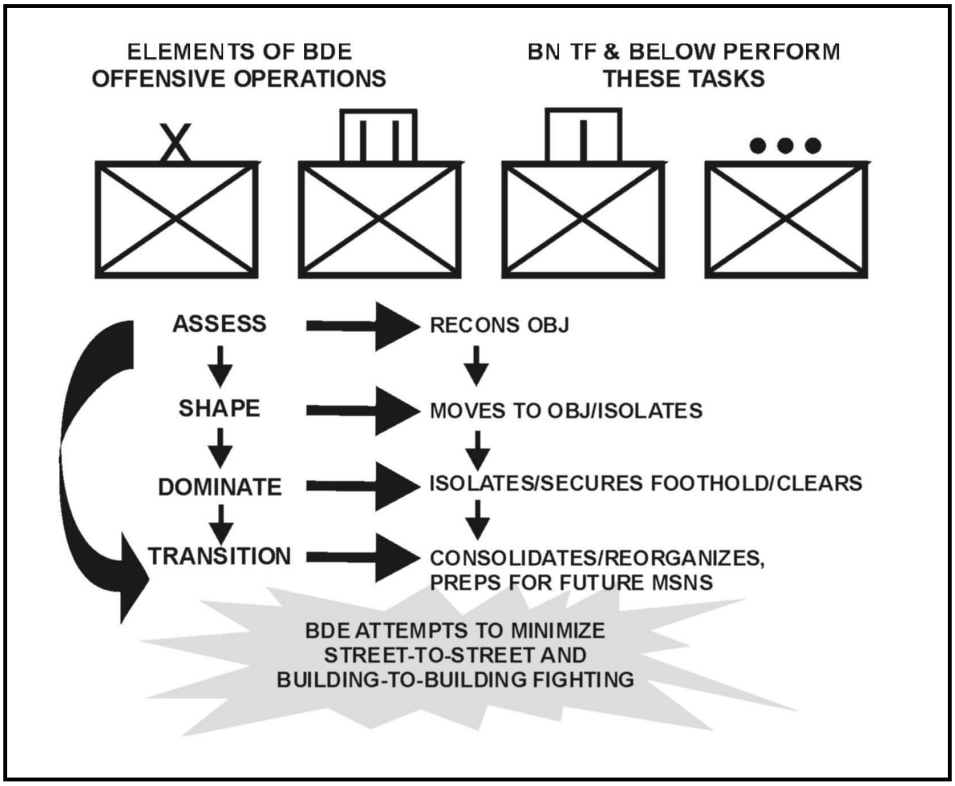

Figure L-2. Offensive urban operational framework.

L-5. TYPES OF OFFENSIVE OPERATIONS

At company level, the offense takes the form of either a hasty or deliberate attack. Both hasty and deliberate attacks are characterized by as much planning, reconnaissance, and coordination as time and the situation permit.

a. **Hasty Attack.** Infantry companies conduct hasty attacks as a result of a movement to contact, a meeting engagement, or a chance contact during a movement; after a successful defense or part of a defense; or in a situation where the unit has the opportunity to attack vulnerable enemy forces. Companies may also be required to conduct hasty attacks as a result of deteriorating conditions from stability and support operations, which require them to conduct hasty attacks for force protection. The hasty attack in an urban area differs from a hasty attack in open terrain because the close nature of the terrain makes command, control, and communications difficult. Also, massing fires to suppress the enemy may be difficult. In urban areas, incomplete intelligence and concealment may require the maneuver unit to move through, rather than around, the friendly unit fixing the enemy in place. Control and coordination must address reducing congestion at the edges of the urban area.

b. **Deliberate Attack.** A deliberate attack is a fully synchronized operation that employs all available assets against the enemy's defense, IAW with the ROE. It is necessary when enemy positions are well prepared, when the urban area is large or severely congested, when the element of surprise is lost, or when the ROE requires the precise application of combat power and lethal force. Deliberate attacks are characterized by detailed planning based on available information, thorough reconnaissance, preparation, and rehearsals. Given the nature of urban terrain, the deliberate attack of an urban area is similar to the techniques employed in assaulting a strong point. Attacking the enemy's main strength is avoided and combat power is focused on the weakest point of his defense. At the company level, a deliberate attack of an urban area usually involves the sequential execution of the tactical tasks below.

(1) ***Reconnoiter the Objective.*** This involves making a physical reconnaissance of the objective with company assets and those of higher headquarters, as the tactical situation permits. It also involves a map reconnaissance of the objective and all the terrain that will affect the mission, to include the analysis of aerial imagery, photographs, or any other detailed information about the building(s) or other urban terrain, which the company is responsible for. Additionally, any human intelligence (HUMINT) collected by reconnaissance and surveillance units, such as the battalion reconnaissance platoon, snipers, and so forth, should be considered during the planning process.

(2) ***Move to the Objective.*** This may involve moving the company tactically through open and or urban terrain. Movement should be made as rapidly as possible without sacrificing security. Movement should be made along covered and concealed routes and can involve moving through buildings, down streets, subsurface areas, or a combination of all three. Urban movement must take into account the three-dimensional aspect of the urban area.

(3) ***Isolate the Objective.*** Isolating the objective involves seizing terrain that dominates the area so that the enemy cannot supply, reinforce, or withdraw its defenders. It also includes selecting terrain that provides the ability to place suppressive fire on the objective. (This step may be taken at the same time as securing a foothold.) If isolating the objective is the first step, speed is necessary so that the defender has no time to react.

Companies may be required to isolate an objective as part of a battalion operation or may be required to do so independently. Depending on the tactical situation, an Infantry company may isolate an objective by infiltration and stealth.

(4) ***Secure a Foothold.*** Securing a foothold involves seizing an intermediate objective that provides cover from enemy fire and a location for attacking troops to enter the urban area. The size of the foothold is METT-TC dependent and is usually a company intermediate objective. In some cases a large building may be assigned as a company intermediate objective (foothold). As the company attacks to gain a foothold, it should be supported by suppressive fire and smoke.

(5) ***Clear an Urban Area.*** Before determining to what extent the urban area must be cleared, the factors of METT-TC must be considered. The ROE will influence the TTP platoons and squads select as they move through the urban area and clear individual buildings and rooms.

(a) The commander may decide to clear only those parts necessary for the success of his mission if—

- An objective must be seized quickly.
- Enemy resistance is light or fragmented.
- The buildings in the area have large open areas between them. In this case, the commander would clear only those buildings along the approach to his objective, or only those buildings necessary for security. (See Figure L-3.)

(b) An Infantry company may have a mission to systematically clear an area of all enemy. Through detailed analysis, the commander may anticipate that he will be opposed by a strong, organized resistance or will be in areas having strongly constructed buildings close together. Therefore, one or two platoons may attack on a narrow front against the enemy's weakest sector. They move slowly through the area, clearing systematically from room to room and building to building. The other platoon supports the clearing units and is prepared to assume their mission.

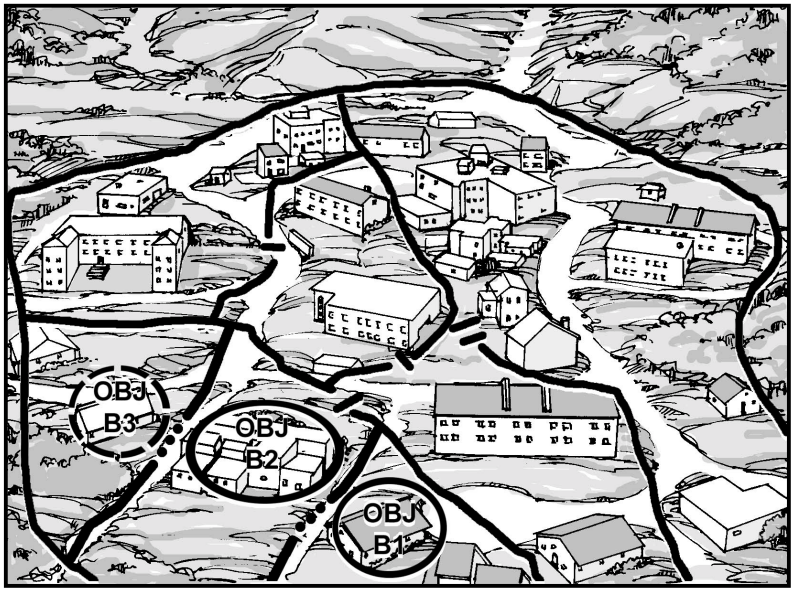

Figure L-3. Clearing selected buildings within sector.

(6) ***Consolidate/Reorganize and Prepare for Future Missions.*** Consolidation occurs immediately after each action. Consolidation is security and allows the company to prepare for counterattack and to facilitate reorganization. It is extremely important in an urban environment that units consolidate and reorganize rapidly after each engagement. The assault force in a cleared building must be quick to consolidate in order to repel enemy counterattacks and to prevent the enemy from infiltrating back into the cleared building. After securing a floor, selected members of the assault force are assigned to cover potential enemy counterattack routes to the building. Priority must be given to securing the direction of attack first. Those soldiers alert the assault force and place a heavy volume of fire on enemy forces approaching the building. Reorganization occurs after consolidation. Reorganization actions prepare the unit to continue the mission; many actions occur simultaneously.

(a) *Consolidation Actions.* Platoons assume hasty defensive positions after the objective has been seized or cleared. Based upon their specified and implied tasks, assaulting platoons should be prepared to assume an overwatch mission and support an assault on another building, or another assault within the building. Commanders must ensure that platoons guard enemy mouseholes between adjacent buildings, covered routes to the building, underground routes into the basement, and approaches over adjoining roofs.

(b) *Reorganization Actions.* After consolidation, the following actions are taken:

- Resupply and redistribute ammunition, equipment, and other necessary items.
- Mark the building to indicate to friendly forces that the building has been cleared.
- Move support or reserve elements into the objective if tactically sound.
- Redistribute personnel and equipment on adjacent structures.
- Treat and evacuate wounded personnel.
- Treat and process PWs.
- Segregate and safeguard civilians.
- Re-establish the chain of command.
- Redistribute personnel on the objective to support the next phase or mission.

(c) *Prepare for Future Missions.* The company commander anticipates and prepares for future missions and prepares the company chain of command for transition to defensive and/or stability and support missions.

Note: Friendly force situational understanding is significantly improved in digitally equipped units through the use of Force XXI Battle Command Brigade and below (FBCB2) assets.

L-6. TASK ORGANIZATION

The company commander will normally task organize his company into two elements: an assault element and a support element. The support element may be given a number of tasks that are conducted on order or simultaneously; specifically, support by fire, isolate the objective, and conduct other support functions. The tactical situation will dictate whether or not separate elements need to be task-organized in order to conduct these support missions. The mission to breach is METT-TC dependent and may be given to the assault or support element; or a separate element may be formed to conduct this task. If

available, engineers will usually be task organized into the element that will perform the breach. The size and composition of the elements are determined by METT-TC. If the company is part of a battalion operation, the company could be given the mission to conduct one or more of the tasks mentioned above. If conducting an urban attack independently, the Infantry company will perform both assault and support tasks.

a. **Assault Element.** The purpose of the assault element is to kill, capture, or force the withdrawal of the enemy from an urban objective. The assault element of an Infantry company may consist of one or more platoons usually reinforced with engineers, BFVs, and possibly tanks. Building and room clearing are conducted at the platoon and squad level. The assault element must be prepared to breach to gain entry into buildings.

b. **Support Element.** The purpose of the support element is to provide any support that may be required by the assault element. The support element at company level normally consists of the company's organic assets (platoons, mortars, and antitank weapons), attachments, and units that are under the OPCON of the company commander. This assistance includes, but is not limited to, the following:

- Suppressing and obscuring enemy within the objective building(s) and adjacent structures.
- Isolating the objective building(s) with observation and direct or indirect fires to prevent enemy withdrawal, reinforcement, or counterattack.
- Breaching walls en route to and in the objective structure.
- Destroying or suppressing enemy positions with direct fire weapons.
- Securing cleared portions of the objective.
- Providing squads to assume assault element missions.
- Providing resupply of ammunition, explosives, and personnel.
- Evacuating casualties, EPWs, and noncombatants.

c. **Reserves.** (See Chapter 4, paragraph 4-4c for more information.) Companies fighting in urban terrain may not be able to designate a reserve, based on the number of troops required to conduct offensive operations. A platoon(s) may be detached from the company to form a battalion reserve. The company reserve, if one is designated, should be mobile and prepared for commitment. Because of the available cover in urban areas, the reserve can stay close to forward units. The reserve normally follows within the same block so that it can immediately influence the attack. The size of the reserve is METT-TC dependent, but at company level, the reserve normally consists of a squad, detached from an organic platoon, or attached elements. In addition to the tasks discussed in Chapter 4, the reserve may be called upon to perform one or more of the following tasks based on the commander's priority of commitment:

- Assuming the mission of the assault element.
- Clearing bypassed enemy positions.
- Moving behind the assault element to provide security in cleared buildings, allowing the assault element to continue to move.

d. **Breaching Element.** At the company level, breaching is normally conducted by the assault element. However, a separate breaching element may be created and a platoon may be given this mission and task organized accordingly. The purpose of breaching is to provide the assault element with access to an urban objective. Breaching can be accomplished using explosive, ballistic, thermal, or mechanical methods. Ballistic breaching includes using direct fire weapons; mechanical breaching includes the use of

crowbars, axes, saws, sledgehammers, or other mechanical entry devices. Thermal breaching is accomplished through the use of a torch to cut metal items such as door hinges. Attached engineers, or a member(s) of the assault element who has had additional training in mechanical, thermal, ballistic, and explosive breaching techniques, may conduct the breach.

e. **Sample Task Organizations.** Task organization of the company will vary based on the factors of METT-TC and the ROE.

(1) ***Light Infantry Task Organization.*** An Infantry company conducting this mission might task-organize as follows:

Assault — Two rifle platoons and one rifle platoon(-) reinforced with engineers (attached to the platoons).
Reserve — A squad from one of the platoons.
Support — The company AT weapons, 60-mm mortar section, and M240 machine guns. (Other support provided by the battalion task force.)

(2) ***Light/Heavy Task Organizations.*** Different METT-TC factors might produce the following light/heavy task organizations:

Example 1:
Assault — Two rifle platoons, each reinforced with engineers.
Reserve — One rifle platoon.
Support — BFV platoon and the company AT weapons and 60-mm mortar section. (Other support provided by the battalion task force.)

Example 2:
Assault — Two rifle platoons reinforced with engineers.
Reserve — One rifle platoon.
Support — One tank platoon. The company AT weapons and 60-mm mortar section.

Example 3:
Assault — Two rifle platoons, each with engineers. One tank section OPCON to an Infantry platoon.
Reserve — One rifle platoon.
Support — A tank section and the company AT weapons under the tank platoon leader's control. The company 60-mm mortar section. (All available direct and indirect fire weapons should be used to isolate objective buildings. Direct fire down streets and indirect fire in open areas between buildings will help in the objective isolation.)

Note: The company commander may use the company executive officer, tank platoon leader, BFV platoon leader, or first sergeant to control the support element, as the task organization and situation dictate. Based on METT-TC factors, a BFV platoon can perform any of the missions described above (assault, support, reserve). Unit integrity should be maintained at the platoon level. If the tactical

situation requires the employment of sections, it should be for a limited duration and distance.

L-7. ISOLATE AN URBAN OBJECTIVE

Infantry companies isolate an urban objective to prevent reinforcement of, or a counterattack against, the objective and to kill or capture any withdrawing enemy forces. When planning the isolation, commanders must consider three-dimensional and in-depth isolation of the objective (front, flanks, rear, upper stories, rooftops, and subsurface). All available direct and indirect fire weapons, to include attack helicopters and CAS, should be employed, consistent with the ROE. Isolating the objective is a key factor in facilitating the assault and preventing casualties. The company may perform this mission as the support element for a battalion operation, or it may assign the task to its own internal support element for a company attack. In certain situations, Infantry companies may be required to isolate an objective or an area for special operations forces or for stability/support operations. When possible, the objective should be isolated using stealth and or rapid movement in order to surprise the enemy. Depending on the tactical situation, Infantry companies may use infiltration in order to isolate the objective. Likely tasks include, but are not limited to, the ones described below.

Note: Combat experience and recent rotations at the CTCs have shown that many casualties can be sustained when moving between buildings, down streets, and through open areas in order to gain entry into a building either to gain a foothold or to clear it. One of the purposes of isolation at the company level must be to dominate the outside area that leads to the point of entry in order to allow assaulting troops to enter the building without receiving effective fire from the enemy. This is accomplished by the effective use of direct and indirect fires, obscurants, maintaining situational understanding, and exercising tactical patience prior to movement.

a. **Isolating the Objective (Battalion Attack).** An Infantry company may isolate the objective as the support element for a battalion operation. When an Infantry company is given this mission, the objective will normally be a larger structure, a block, or group of buildings. The company commander will task organize his platoons and assign them support by fire positions based on the factors of METT-TC. In addition to isolating the objective, the company (support element) may be given additional tasks that will be conducted on order or simultaneously. Examples of these additional tasks include assuming assault element missions, securing cleared buildings, handling noncombatants and EPWs, and CASEVAC.

b. **Isolating the Objective (Company Attack).** When an Infantry company conducts an attack, the task organization and tasks given to the company support element will be determined by the factors of METT-TC. If the company conducts a company attack, the objective can be a building, a block or group of buildings, a traffic circle, or a small village (Figure L-4).

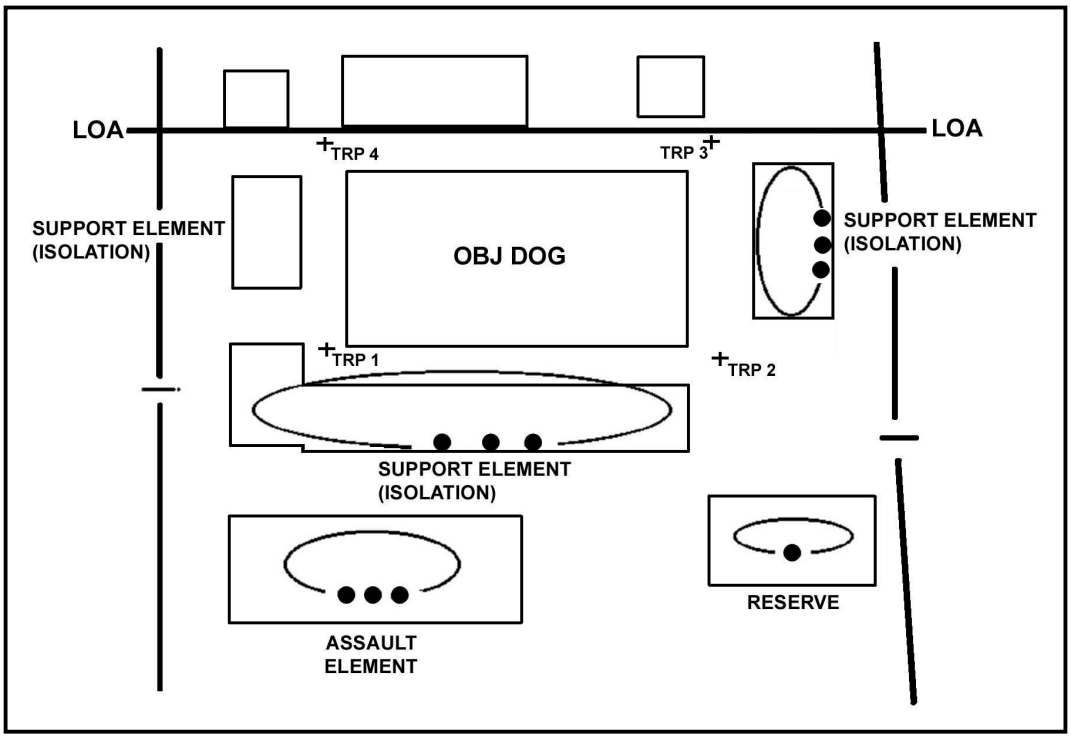

Figure L-4. Isolating an urban objective

c. **Tasks.** The company commander will isolate the objective with direct and indirect fires prior to and during the assault element's execution of its mission. The company will-

- Suppress known, likely, and suspected enemy targets, consistent with the ROE, with direct and indirect fire weapons. Under restrictive ROE, suppression may be limited only to actual enemy locations.
- Cover mounted avenues of approach with antiarmor weapons.
- Cover dismounted avenues of approach with automatic weapons.
- Control key terrain near or adjacent to the objective in order to prevent the enemy from reinforcing his positions, withdrawing, or counterattacking.
- Be prepared to move to other locations in order to suppress enemy fires and neutralize enemy positions as the assault element performs its tasks.

(1) Company commanders must give specific instructions to subordinate leaders concerning where to place fires in support of the assault element. For example, "from TRP 1 to TRP 2", "along the third and second floor windows on the east side of Building 21", "shift fires to the west side of the objective from TRP 1 to TRP 4 when you see the green star cluster", etc. Once suppressive fires on the objective begin, they will normally be increased and continued until masked by the advancing assault element. Suppressive fires may or may not be used from the beginning of the assault depending on the ROE. Targets can be marked and identified with tracer rounds; M203 smoke, HE, or ILLUM rounds; voice and hand or arm signals; laser pointers; or similar devices.

(2) The precise well-placed volume of fire, as opposed to a volume of fire, will suppress the enemy. The volume of fire and types of weapons employed will be ROE

dependent. Once masked, fires are shifted to upper or lower windows and continued until the assault force has entered the building. At that time, fires are shifted to adjacent buildings to prevent enemy withdrawal or reinforcement. If the ROE are restrictive, the use of supporting fires will normally be limited to known enemy locations that have engaged the unit.

Note: Care must be taken in urban areas when WP, ILLUM, or tracers are used since urban fires can be caused. Care must also be exercised if sabot rounds are used by armored vehicles, based on their penetration capability. Sabot rounds can penetrate many walls and travel great distances to include passing through multiple buildings, creating unintended damage, casualties, and fratricide.

d. **Direction of Assault Technique of Direct Fire Planning and Control.** In this technique, the company commander assigns building numbers in a consistent pattern in relation to the direction of assault. In the example shown in Figure L-5, the commander numbered the buildings consecutively, in a counterclockwise manner. Further, the sides of the buildings were color coded consistently throughout the objective area (WHITE—direction of assault side; GREEN—right side; BLACK—rear side; RED—left side; BLUE—roof). An odd shaped building is also shown. Note that a "four-sided" concept was retained to minimize confusion. Further designations of WHITE 1, WHITE 2, WHITE 3, and so on from left to right can be added to specify which wall will be engaged. Apertures on the buildings are also labeled consecutively using rows and columns, as shown. In the example, "OBJ 4, WHITE, window A1" is the lower left-hand window on the direction of assault side of OBJ 4. All designations are labeled in relation to the direction of assault. (See FM 34-130 for additional information on building shapes and structural labeling.)

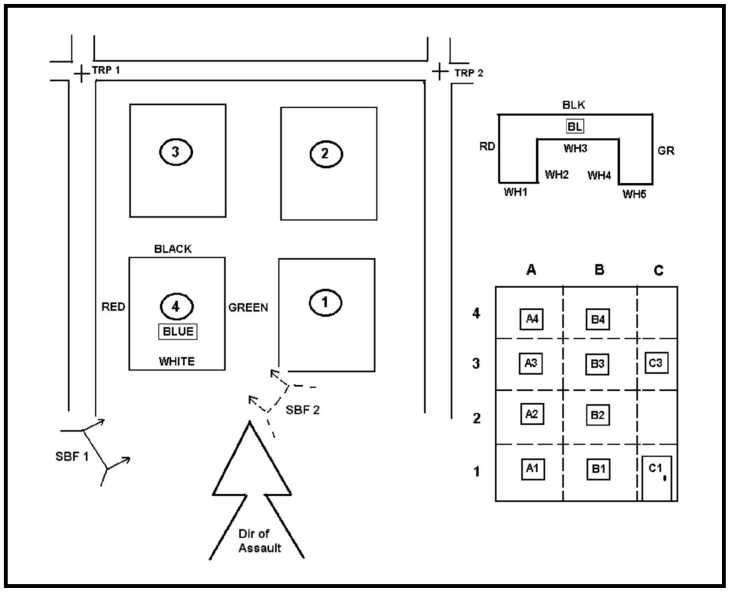

Figure L-5. Direction of assault technique of direct fire planning and control.

L-8. ASSAULT A BUILDING

The company will conduct this mission as part of the assault element of a battalion task force or independently. (Independently is defined here as a company having to provide its own support element, as opposed to conducting an operation without flank and rear support, such as a raid or ambush.) If it is conducted as the assault element of a battalion task force, it will probably be conducted against a large building defended by a strong enemy force, for example, a reinforced platoon. Company commanders will need to clearly understand the specified and implied tasks required to accomplish the mission, as well as the brigade/battalion commanders' intent and the desired mission end-state. This will allow the company commander to task organize and issue specific missions to his subordinate elements concerning which floors and rooms to clear, seize, or bypass. As an example, Figure L-6 depicts an Infantry TF assigned the mission of clearing the objectives in its sector (DOG and TAIL). Company B has been given the TF supporting effort of seizing and clearing OBJ TAIL. The company commander has decided to assign an intermediate objective (WING) to 1st platoon. 3d platoon is the support element with the mission of isolating WING (1st and 2d squads) and providing one squad to act as the company reserve (3d squad). 2d platoon has the mission of passing through 1st platoon, which will mark a passage lane and seize TAIL.

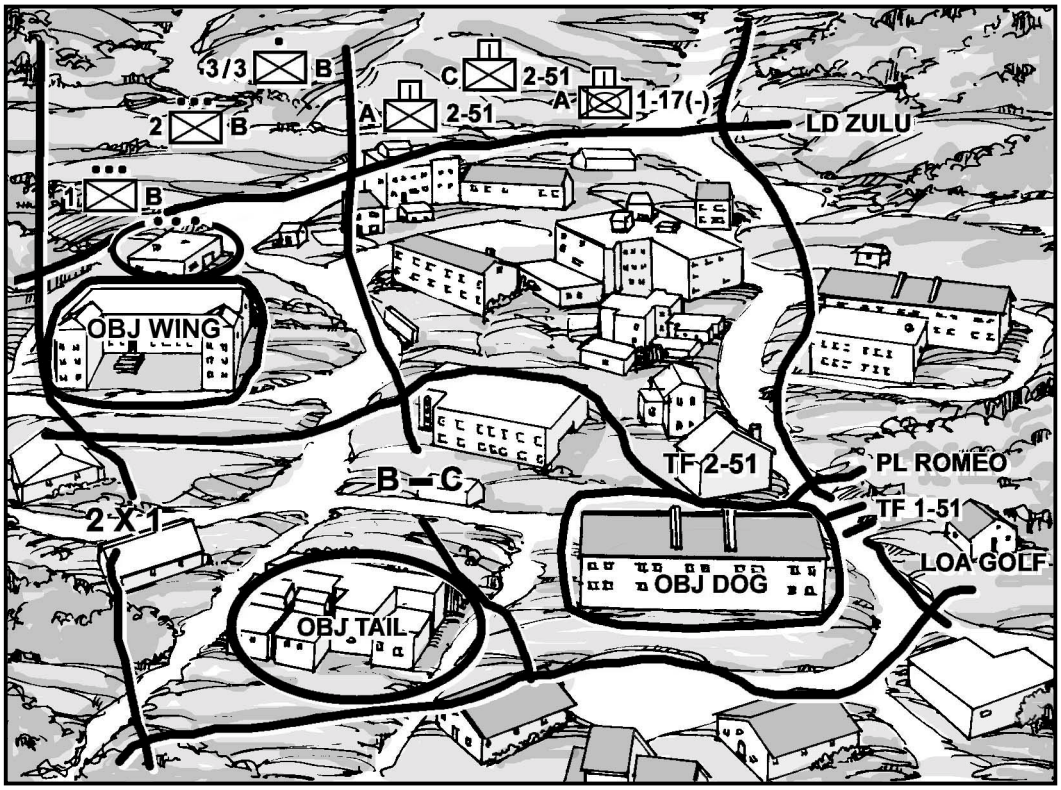

Figure L-6. Assault of a building.

a. **Execution.** Platoons should move by bounds by floor when clearing a multistory building. This permits troops to rest after a floor has been cleared. It is likely that

platoons will be required to leave security on floors and in cleared rooms and also facilitate the passage of another platoon in order to continue the assault. The assault element must quickly and violently execute its assault and subsequent clearing operations. Once momentum has been gained, it is maintained to prevent the enemy from organizing a more determined resistance on other floors or in other rooms. If platoons come across rooms/hallways/stairwells that are barricaded with furniture or where obstacles have been placed, they should first attempt to bypass the barricade/obstacle and maintain the momentum of the attack. If they cannot bypass the barricade/obstacle, security should be placed on the barricade/obstacle, it should be checked for booby traps, and should then be reduced. Also, sealing doors and floors may be an option in order to maintain momentum. Subordinate leaders should continue the momentum of the assault, yet not allow the operation to become disorganized.

b. **Ammunition and Equipment.** METT-TC factors and the ROE will determine how the assault element is equipped and armed. The assault element will carry only a fighting load of equipment and as much ammunition as possible, especially grenades (fragmentation, smoke, concussion, and stun consistent with the building construction and the ROE). The support element maintains control of additional ammunition and equipment not immediately needed by the assault element. An often-overlooked munition in an urban battle is the light antitank weapon such as the M72 LAW and the AT-4. Soldiers can use these for a variety of purposes such as suppressing a manned position or supporting the breaching or assault elements. Resupply should be pushed to the assault element by the support element. Commanders must carefully manage the soldier's load during the assault. Normally, ammunition, water, special assault weapons/equipment, and medical supplies/litters are the only items carried in the assault. Attached or OPCON tank or BFV platoons should also configure their ammunition load to support their mission, consistent with the ROE.

c. **Assault Locations.** The assault may begin from the top or bottom of the building.

(1) ***Top Entry.*** Entry at the top and fighting downward is the preferred method of clearing a building. This method is only feasible, however, when access to an upper floor or rooftop can be gained by ladder; from the windows or roofs of adjoining, secured buildings; or, when enemy air defense weapons can be suppressed and troops can be transported to the rooftops by helicopter. Rooftops should be treated as danger areas when surrounding buildings are higher and the element will be exposed to fire from those buildings. Helicopters should land only on those buildings that can support the weight of the helicopter such as rooftop heliports or parking garages. However, soldiers can dismount as the helicopter hovers a few feet above the roof. Troops can then breach the roof or common walls. They may use ropes, ladders, or other means to enter the lower floors through the holes created. Ladders can be used to conduct an exterior assault of an upper level if soldiers' exposure to enemy fire can be minimized.

(2) ***Bottom Entry.*** Entry at the bottom is common and may be the only option available. When entering from the bottom, breaching a wall is the preferred method because doors and windows may be booby-trapped and covered by fire from inside the structure. If the assault element must enter through a door or window, entry from a rear or flank position is preferred. Under certain situations. the ROE may not permit the use of certain explosives, therefore entry through doors and windows may be the only option available. Armored vehicles can be especially useful in supporting bottom entry.

d. **Breaching.** Squads and platoons will have to conduct breaching. Engineers may be attached to the unit responsible for breaching. Depending on the factors of METT-TC, company commanders may need to designate specific breaching locations or delegate the task to platoon leaders. The ROE will also influence whether mechanical, thermal, ballistic, or explosive breaching will be used. For example, if BFVs are attached to the company and the ROE permit their use, they can breach the wall by main gun fire for the initial entry point.

e. **Assault Tasks.** Once inside the building, the priority tasks are to cover the staircases and to seize rooms that overlook approaches to the building. These actions are required to isolate enemy forces within the building and to prevent reinforcement from the outside. The assault element clears each room on the entry floor and then proceeds to clear the other floors to include the basement. If entry is not made from the top, consideration may be given to rushing/clearing and securing a stairwell and clearing from the top down, if the tactical situation permits. If stairwell use is required, minimize their use and clear them last. If there is a basement, it should be cleared as soon as possible, preferably at the same time as the ground floor. The procedures for clearing a basement are the same as for any room or floor, but important differences do exist. Basements may contain entrances to tunnels such as sewers and communications cable tunnels. These should be cleared and secured to prevent the enemy from infiltrating back into cleared areas.

DANGER

A SAFETY CONSIDERATION FOR CLEARING BUILDINGS IS THE HIGH PROBABILITY OF RICOCHET.

f. **Suppressive Fires During the Assault.** The support element provides suppressive fire while the assault element is systematically clearing the building. It also provides suppressive fire on adjacent buildings to prevent enemy reinforcements or withdrawal. Suppressive fire may consist of firing at known and suspected enemy locations; or, depending on the ROE, may only include firing at identified targets or returning fire when fired upon. The support element destroys or captures any enemy trying to exit the building. The support element must also deal with civilians displaced by the assault. Armored vehicles can be especially useful in providing heavy, sustained, accurate fire.

g. **Clearing Rooms.** Company commanders must ensure that clearing platoons carry enough room marking equipment and plainly mark cleared rooms from the friendly side IAW unit SOP (Figure L-7). Also, if the operation occurs during limited visibility, marking must be visible to friendly units. The support element must understand which markings will be employed and ensure that suppressive fires do not engage cleared rooms and floors. Maintaining situational understanding concerning the location of the assault teams and which rooms/floors have been cleared is imperative and a key command and control function for the company commander. Radios can be consolidated, if necessary, with priority going to the squads and platoons clearing rooms. When exiting cleared buildings friendly troops should notify supporting elements using the radio or other preplanned signals.

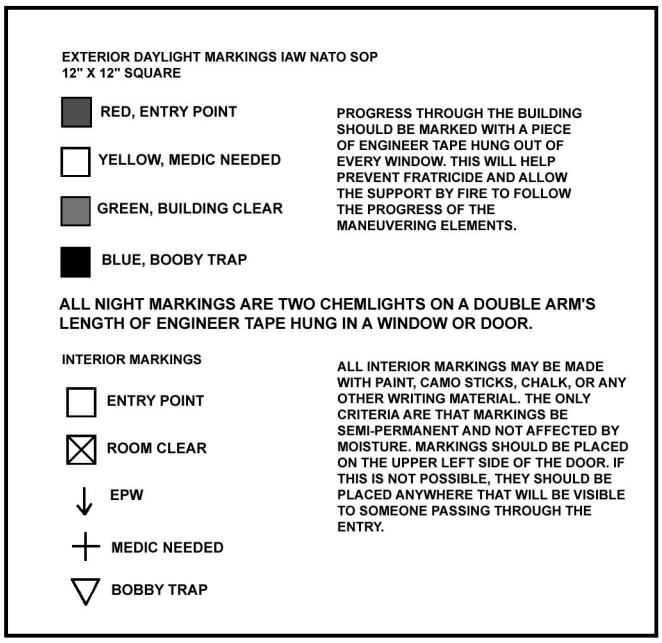

Figure L-7. Sample marking SOP.

L-9. ATTACK A BLOCK OR GROUP OF BUILDINGS

An Infantry company will normally attack a block or group of buildings as part of a battalion task force. To attack a block or a group of buildings, an Infantry company may need to be reinforced with BFVs or tanks and engineers, consistent with the ROE and the enemy situation.

a. **Execution.** The execution of this mission is characterized by platoon attacks supported by both direct and indirect fires. Success depends on isolating the enemy positions which often become platoon objectives, suppressing enemy weapons, seizing a foothold in the block, and clearing the block's buildings room by room.

b. **Direct Fire Weapons.** BFVs, tanks, machine guns, and other direct fire support weapons fire on the objective from covered positions, consistent with the ROE. These weapons should not be fired for prolonged periods from one position. The gunners should use a series of positions and displace from one to another to gain better fields of fire and to avoid being targeted by the enemy. Direct fire support tasks can be assigned as follows:

- Machine guns fire along streets and into windows, doors, mouseholes, and other probable enemy positions. ROE may restrict firing only to known enemy locations.
- BFVs, tanks, and antitank weapons fire at enemy tanks and other armored vehicles. They can also provide a countersniper capability due to their range and target acquisition capability.
- Tanks fire at targets protected by walls and provide protection against enemy tanks, as required.

- BFVs may be used to create breaches with the 25-mm gun and TOW.
- Riflemen engage targets of opportunity.

c. **Obscuration and Assault.** Before an assault, the company commander should employ smoke to conceal the assaulting platoons. He secures their flanks with direct fire weapons and by employment of the reserve, if necessary. Concealed by smoke and supported by direct fire weapons, an assaulting platoon attacks the first isolated building. The assault element utilizes the cover of suppressive fires to gain a foothold. The company commander must closely coordinate the assault with its supporting fire so that the fire is shifted at the last possible moment. The squads and platoons then clear each designated building. After seizing the block, the company consolidates and reorganizes to repel a counterattack or to continue the attack. Periods of limited visibility may provide the best conditions to attack, especially if NVGs provide the company a technological advantage over the threat.

Note: Obscuration rounds may cause uncontrolled fires in the city and must be carefully planned.

L-10. HASTY ATTACK OF A VILLAGE

The Infantry company may find itself moving to an urban area or conducting a movement to contact with a mission of clearing a village of enemy. The following discussion provides a technique for conducting a hasty attack on a village. The company commander makes a quick assessment of the factors of METT-TC and reacts appropriately to support the higher level commander's intent.

a. **Establish Support.** If attached or OPCON, tanks, BFVs, MK19s or M2HBs mounted on HMMWVs, and TOWs assume support-by-fire positions from which they can fire on the village, prevent the enemy from withdrawing, and destroy any reinforcements (support element functions). If these assets are not available, then the company commander moves Infantry elements into position to accomplish the same tasks. The company 60-mm mortar and AT sections also provide fire support. Armored vehicles can reposition during the assault, if necessary, to gain better fields of fire and provide better support.

b. **Assault the Village.** The rifle platoons assault from a covered route so as to hit the village at a vulnerable point (Figure L-8). As the platoons approach the village, smoke is employed to screen their movement and supporting fires are shifted. Once the platoons close on the village, they clear the buildings quickly, consistent with the ROE, and consolidate. The company is then ready to continue operations.

Figure L-8. Hasty attack of a village.

Section III. DEFENSIVE OPERATIONS

The company will normally conduct defensive operations as part of a battalion task force. Defensive operations may be performed as part of a purely defensive mission to retain terrain or destroy attacking enemy forces, or they may be performed as part of stability and support operations. The elements shown in Figure L-9 will normally be incorporated as part of the urban defensive planning process. The elements are similar to those in offensive operations in that the brigade commander (two levels up) tries to avoid isolation, through security operations; defensive missions are assigned to companies in order to achieve the brigade commander's intent and desired end-state; and finally, the brigade transitions to stability and or support actions. During urban defensive operations, the transition to stability and support operations may not be clear to the soldiers. Commanders must offset this tendency with clear mission type orders and updated ROE. Again, as in offensive operations, the elements are not phases. They may occur simultaneously or sequentially. Well planned and executed defensive operations will have all four elements present. During defensive operations the brigade commanders seek to—

- Avoid being isolated by the enemy.
- Defend only the decisive terrain, institutions, or infrastructure.
- Use offensive fire and maneuver to retain the initiative.

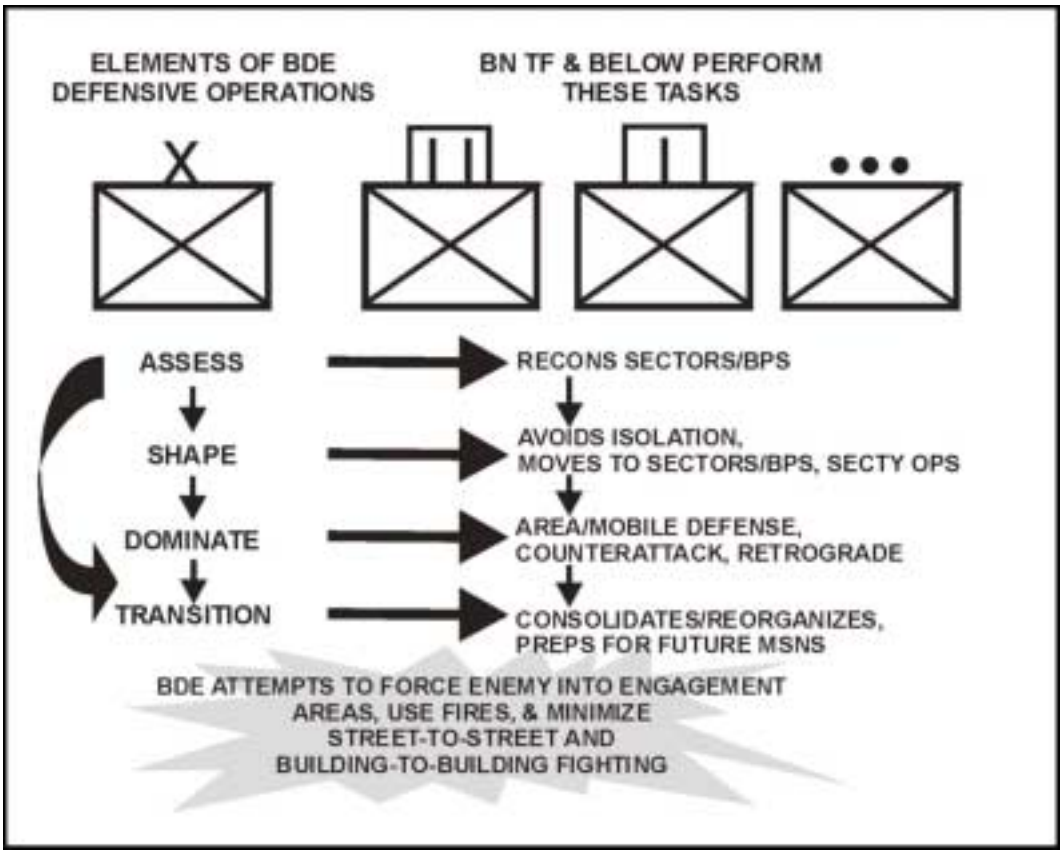

Figure L-9. Elements of defensive urban actions.

L-11. GENERAL CONSIDERATIONS

Of the two patterns of defense, area and mobile, the area defense will probably be the pattern most used since most of the reasons for defending an urban area are focused on retaining terrain. The mobile defense pattern is more focused on the enemy and the commander may decide to use it based on his estimate of the situation. In an urban area, the defender must take advantage of the abundant cover and concealment. He must also consider restrictions to the attacker's ability to maneuver and observe. By using the terrain and fighting from well-prepared and mutually supporting positions, a defending force can inflict heavy losses on, destroy, delay, block, or fix a much larger attacking force.

L-12. ORGANIZATION OF THE DEFENSE

The factors of METT-TC and the ROE will determine how the company plans, prepares, and executes the defense. The defense is organized into three areas: the security force area, main battle area, and rear area. (See Figure 5-1, page 5-4 and paragraph 5-3 for more information.) A company defending in urban areas may have missions in any one of these defensive areas, depending on the nature of the operation. Infantry companies are well suited to conduct defensive operations in close urban terrain where engagement

ranges will be short, where there is abundant cover and concealment, and where the enemy's assault must be repelled.

Note: This defensive organization will likely be used against a conventional enemy force that may threaten US forces with mechanized and dismounted Infantry supported by other combined arms. This defensive organization may also occur in a brigade area of operation (AO) where there are multiple threats. For example, one part of the AO may require linear features; other parts may require the use of other defensive techniques, such as a perimeter defense, against different types of threats in the same brigade AO.

a. **Security Operations.** The defensive battle normally begins with a combined arms force conducting security actions well forward of the main body. Company missions consist of security, reconnaissance, and counter-reconnaissance tasks. Infantry companies assigned counter-reconnaissance missions to support these security operations employ ambushes, mines, obstacles, deception, security patrols, OPs, indirect fires, camouflage, demonstrations, and other measures to destroy or deceive the enemy's reconnaissance elements. (See Chapter 5, paragraph 5-7, for further discussion of counterreconnaissance.) Again, urban areas are well suited for Infantry counter-reconnaissance operations because of the abundance of cover and concealment which permits Infantry to move by stealth.

b. **Main Battle Area (MBA).** The decisive battle is normally fought in the MBA. Depending on the threat, company commanders can deploy their platoons on the forward edges of the urban area or in battle positions in depth (Figure L-10). In either case, the defense is made stronger by including forces that are defending on close terrain or on the flanks into the defensive scheme.

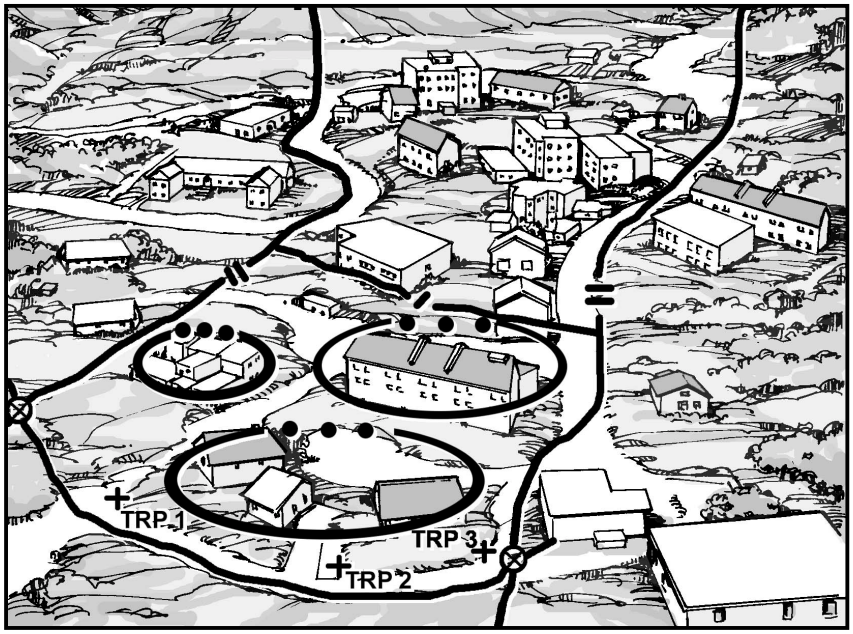

Figure L-10. Platoon battle positions in a urban area.

(1) ***Size of Battle Positions.*** The size and location of battle positions within the AO depends mainly on the type of enemy encountered and the ability to move between positions to block threatened areas. It may be desirable to place small antiarmor elements, secured by Infantry, on the forward edges while the main defense is deployed in depth.

(2) ***Considerations.*** Companies assigned battle positions on the forward edge of an urban area should—

- Provide early warning of the enemy's advance.
- Engage the enemy at long range.
- Deceive the enemy as to the true location of the defense.

(3) ***Sectors.*** Depending on the factors of METT-TC, commanders may also assign platoons sectors to defend instead of battle positions. In certain instances, the company commander may employ both. Sectors would normally be assigned when blocks and streets provide a grid type pattern and boundaries can be clearly delineated. (See Chapter 5, paragraph 5-5, for detailed information on when to assign either or both.)

(4) ***Actions on Contact.*** When enemy forces enter and maneuver to seize initial objectives, the defender should employ all available fires to destroy and suppress the direct-fire weapons that support the ground attack. Tanks and enemy APCs should be engaged as soon as they come within the effective range of antiarmor weapons. As the enemy attack develops, the actions of small-unit leaders assume increased importance. Squad and platoon leaders are often responsible for fighting independent battles. Thus, it is important that all leaders understand their commander's concept of the defense. Situational understanding must be maintained and where the enemy's efforts are likely to result in a gaining a foothold, violent counterattacks must be employed to deny him access into the MBA.

c. **Rear Area.** Infantry companies may be deployed in the rear area to protect CSS elements and to defend high payoff assets, lines of communications, C2 nodes, and other key locations.

d. **Counterattacks.** Small Infantry-heavy reserves supported by BFVs and or tanks, if available, should be prepared to counterattack to regain key positions, to block enemy penetrations, to provide flank protection, and to assist by fire the disengagement and withdrawal of endangered positions. It is especially important for enemy footholds to be repelled violently. When the reserves are committed to counterattack to reinforce a unit, they may be attached to the unit in whose sector the counterattack is taking place. Otherwise, the counterattack becomes the main effort. This makes coordination easier, especially if the counterattack goes through the unit's positions.

e. **Defense During Limited Visibility**. Company commanders can expect the attacker to use limited visibility conditions to conduct necessary operations to sustain or gain daylight momentum.

(1) Commanders should employ the following measures to defend against attacks during limited visibility:

(a) Defensive positions and crew-served weapons should be shifted from an alternate position or a hasty security position just before dark to deceive the enemy as to the exact location of the primary position.

(b) Unoccupied areas between units, which can be covered by observed fire during daylight, may have to be occupied, blocked, or patrolled during limited visibility. Early warning devices and obstacles need to be installed.

(c) Radar, remote sensors, and night observation devices should be emplaced to cover streets and open areas. Thermal imagery devices, such as the one found on the TOW weapon system, are excellent for observation during limited visibility.

(d) Noise-making devices, tanglefoot tactical wire, and LP/OPs should be positioned on all avenues of approach for early warning and to detect infiltration.

(e) Artificial illumination should be planned, to include the use of street lamps, stadium lights, pyrotechnics, visible and IR ILLUM, and so forth.

(f) Indirect fire weapons, grenade launchers, and hand grenades should be used when defenses are probed to avoid disclosure of defensive positions.

(g) Tank and BFV platoons must know the locations of friendly positions. The use of thermal recognition signals and markers can help decrease the possibility of fratricide.

(2) Commanders should initiate FPFs through the use of a planned signal. Crew-served weapons, armored vehicle-mounted weapons if available, and individual riflemen fire within their assigned sectors. Grenades and command-detonated mines should be used to supplement other fires as the enemy approaches the positions.

(3) Defenders should move to daylight positions before BMNT. Buildings should be marked from the friendly side IAW unit SOP in order to facilitate movement. Armored vehicles can be used to cover the movement of friendly troops.

f. **Communications Restrictions.** Radio communications will initially be the primary means of communication for controlling the defense of an urban area and for enforcing security. Structures and a high concentration of electrical power lines may degrade radio communication in urban areas. Wire should be emplaced and used as the primary means of communications as time permits. However, wire can be compromised if interdicted by the enemy. Messengers can be used as another means of communication. Visual signals may also be used but are often not effective because of the screening effects of buildings and walls. Signals must be planned, widely disseminated, and understood by all assigned and attached units. Increased battle noise makes the effective use of sound signals difficult.

L-13. HASTY DEFENSE

A very likely defensive mission for the Infantry company in urban terrain will be to conduct a hasty defense. This mission is characterized by reduced time for the preparation of the defense. All of the troop leading procedures are the same. The priorities of work will basically be the same, but many will take place concurrently. Units will be deployed, weapons emplaced, and positions prepared in accordance with the mission analysis and amount of time the company commander has available. Companies must be prepared to conduct a hasty defensive mission as part of stability and support operations.

a. **Occupation and Preparation of Positions.** Preparations for the hasty defense will vary with the time available. The preparations described below will generally take between two to four hours. In a hasty defense, the primary effort is to camouflage and conceal the presence of the hasty fighting positions and provide as much protection as possible for the soldiers manning them. Positions are constructed back from the windows in the shadows of the room using appliances, furniture, and other convenient items and materials. The emphasis on fortifying positions and making major alterations to the environment is reduced. These actions will occur after security has been established.

(1) ***Position Crew-Served and Special Weapons.*** Generally, they will be employed from the inside of buildings, unless an outside position is preferable and can be protected and camouflaged. Armored vehicles can exploit longer fields of fire or a reverse slope engagement using buildings to protect the vehicle's position.

(2) ***Emplace Barriers and Obstacles.*** Lack of time means there will be two belts established and they will not be as extensive as in a defense that permits more time. Cover all obstacles with observation and fire.

(a) *First Belt.* The first belt will usually be between 50-100 meters from and parallel to the defensive trace. It will normally consist of wire obstacles, improvised barriers, road craters, and minefields. For example, burning tires and trash have proven to be effective obstacles on urban terrain. Antitank and command detonated mines will be used consistent with the ROE. This belt will block, fix, turn, or canalize the enemy; disrupt attack formations; and inflict casualties.

(b) *Second Belt.* The second belt is the denial belt. It consists of wire obstacles placed around, through, and in the defensive buildings and close-in mine fields as well as in subsurface accesses. It impedes and complicates the enemy's ability to gain a foothold in the defensive area. Command detonated Claymores should be used extensively consistent with the ROE. Claymores should be placed where they will not cause friendly casualties.

(c) *Field-Expedient Obstacles.* Field-expedient obstacles made from available materials, such as rubble, cars and light poles, should be employed.

(3) ***Prepare Positions.*** Squads and platoons will prepare positions using whatever materials are available; for example, filling dressers or other furnishings with earth or other materials.

(4) ***Rehearsals.*** Conduct rehearsals with leaders and soldiers concerning the orientation of the defense, unit positions, location of crew served weapons, CASEVAC, resupply, execution of counterattack plans, withdrawal plan, and so on. One of the more important rehearsals to conduct is the synchronization of direct and indirect fires to accomplish the commander's intent.

(5) ***Movement Enhancement.*** There will not be much time to improve movement within the defense. Units should plan to use subsurface and supersurface (through buildings) routes. Priority should be given to removing obstructions to alternate positions and to the counterattack route.

(6) ***Communications.*** Check communications. Communications will initially be radio. Plans should be made for messengers, and routes improved for them. Wire is emplaced as an improvement to the defense as time and the terrain allow.

Note: The digital force has the potential to provide accurate threat information that can enhance situational understanding, which helps facilitate targeting and obstacle placement. JSTARS; GUARDRAIL; unmanned aerial vehicles, if present; and other reconnaissance assets will significantly improve the threat situational understanding and targeting capability of the unit.

b. **Improving the Defense.** As time permits, the following areas can be given consideration and prioritized in accordance with METT-TC.

- Sleep plan.
- Barrier and obstacle improvement.

- Improvement of primary and alternate positions.
- Preparation of supplementary positions.
- Additional movement enhancement efforts.
- Initiation of patrols.
- Improvement of camouflage.
- Maintenance/refueling.
- Continued rehearsals for counterattack and withdrawal.

L-14. DEFENSE OF VILLAGE

An Infantry company may be given the mission to defend a village. Once the company commander has completed his reconnaissance of the village, he scouts the surrounding terrain and, with the information assembled, he develops his plan for the defense. One of his first decisions is whether to defend with his Infantry on the leading edge of the village or farther back within the confines of the village. Normally, defending on the leading edge will be more effective against an armor heavy force, where the defending company can take advantage of longer range observation and fields of fire. Defending in depth within the village will be more effective against a primarily Infantry heavy force, in order to deny the enemy a foothold. This decision will be based on the factors of METT-TC. This mission is usually characterized with the company defending an urban area that is surrounded by open terrain. The company may need to coordinate with adjacent units to plan for the defense or control of this terrain.

a. **Influencing Factors.** Several factors influence the commander's decision. First, he must know the type of enemy that his company will defend against. If the threat is mainly Infantry, the greater danger is allowing them to gain a foothold in the town. If the threat is armor or motorized Infantry, the greatest danger is that massive direct fire will destroy the company's defensive positions. The company commander must also consider the terrain forward and to the flanks of the village from which the enemy can direct fires against his positions.

b. **Platoon Battle Positions.** Based on the mission analysis, platoons are normally given a small group of buildings in which to prepare their defense, permitting the platoon leader to establish mutually supporting squad-sized positions. This increases the area that the platoon can control and hampers the enemy's ability to isolate or bypass a platoon. A platoon may be responsible for the road through the village. The rest of the company is then positioned to provide all-round security and defense in depth.

c. **Company Mortars and Antitank Weapons.** A position for the company mortars must be chosen that protects mortars from direct fire and allows for overhead clearance. Antitank weapons are placed where they can engage targets at maximum ranges with alternate firing points. Infantry should protect antitank weapons (see paragraphs L-25 and L-27).

d. **BFVs.** Based on METT-TC considerations, BFVs may be placed along the forward edge of the urban area to engage enemy armored vehicles. Friendly armored vehicles can also be placed in positions to the rear of the buildings and interior courtyards where their weapon systems can provide added rear and flank security. Combat vehicles are assigned primary, alternate, and supplementary positions as well as primary and secondary sectors of fire. They should be positioned in defilade behind rubble and walls or inside buildings for movement into and out of the area. Armored vehicles can also be

used for resupply, CASEVAC, and rapid repositioning during the battle. BFVs can also provide a mobile reserve for the company. If a mechanized Infantry platoon is attached, it is controlled through its chain of command. If a mechanized Infantry section is attached, it can be controlled through the senior squad leader.

e. **Tanks.** If a tank platoon is available from the battalion task force, the company commander could place the tanks along the leading edge where rapid fire would complement the antitank weapons. The tank platoon leader should select exact firing positions and recommend engagement areas. If faced by enemy Infantry, the tanks move to alternate positions with the protection of friendly Infantry. These alternate positions allow the tanks to engage to the front as well as the flanks with as little movement as possible. Positions can be selected within buildings and mouseholes can be constructed. After they are withdrawn from the leading edge of the village, the tanks could provide a mobile reserve for the company.

f. **Rubbling.** If he has the authority and the ROE permit, the company commander will also decide if buildings should be rubbled to increase fields of fire. However, rubbling the buildings too soon or rubbling too many may disclose his exact locations and destroy cover from direct fire. Because rubbling may take more resources than are available to a company, careful consideration of available resources must be made prior to rubbling. Additionally, care must be taken not to rubble areas that are necessary to support operations, such as MSRs. Buildings are normally rubbled with engineer assistance; engineers will usually employ explosives and engineer equipment to accomplish this task. If available, armored vehicles can be used to rubble buildings.

g. **FPFs.** FPFs are planned to address the biggest threat to the company—the enemy's Infantry. When firing an FPF inside an urban area is required, mortars are more effective than artillery. This is due to their higher angle of fall that gives them a greater chance of impacting on the street.

h. **Barriers and Obstacles.** Obstacles are easily constructed in an urban area. The company commander must stop enemy vehicles without interfering with his own movement in the village. Therefore, the company detonates cratering charges at key street locations on order. Mines are laid on the outskirts of the town and along routes the company will not use. Barriers and obstacles are normally emplaced in three belts. If attached or OPCON, the tank or BFV platoon leader can assist the commander by giving advice on where to place antivehicular obstacles.

i. **Engineers.** The supporting engineers use C4 and other explosives to make firing ports, mouseholes, and demolition obstacles. Based upon his priority of work, the commander tells the engineer squad leader to assist each of the Infantry platoons preparing the village for defense and to execute the company team's obstacle plan. The engineer squad leader's mission is to tell the Infantrymen exactly where to place the demolitions and how much is needed for the desired effect. He assists in preparation of charges. He also assists in the emplacement and recording of the minefields as well as the preparation of fighting positions.

j. **Service Support.** Ammunition expenditure is usually high when fighting in an urban area. To avoid moving around the village with ammunition resupply during the battle, the commander directs that ammunition be stockpiled in each occupied platoon and squad position. He also orders the platoons to stockpile firefighting equipment,

drinking water, food, and first-aid supplies at each squad position. Other factors the company commander must consider are:

- Resupply/pre-positioning of caches.
- Casualty evacuation.
- Firefighting/ventilation. (See FM 90-10-1.)
- Security.

k. **Communications.** To ensure adequate communications, redundant verbal and nonverbal communications are planned and checked. The company installs a wire net and develops a plan for pyrotechnic signals. Backup wire should be laid in case primary lines are cut by vehicles, fires, or the enemy. The commander also plans for the use of messengers throughout the village.

L-15. DEFENSE OF A BLOCK OR GROUP OF BUILDINGS

An Infantry company operating in urban terrain may have to defend a city block or group of buildings in a core periphery or residential area. The company conducts this operation in accordance with the battalion task force's defensive scheme of maneuver. The operation should be coordinated with the action of security forces charged with delaying to the front of the company's position. The defense should take advantage of the protection of buildings that dominate the avenues of approaches into the MBA. This mission differs from defense of a village in that it is more likely to be conducted completely on urban terrain, without surrounding open terrain that characterizes the defense of a village. An Infantry company is particularly well suited for this type of mission, since the fighting will require the enemy to move Infantry into the urban area in order to seize and control key terrain. Table L-2 describes the frontages that are normally occupied when defending on this type of terrain. The density of buildings, rubble, and street patterns will dictate the company's frontage.

UNIT	FRONTAGES	DEPTHS
BN or BN TF	4 to 8 Blocks	3 to 6 Blocks
CO or CO TM	2 to 4 Blocks	2 to 3 Blocks
Platoon	1 to 2 Blocks	1 Block

Table L-2. Approximate frontages and depths.

Note: An average city block has a frontage of about 175 meters. These minimum figures apply in areas of dense, block type construction; multi-story buildings; and underground passages. The factors of METT-TC must be applied to the defense of buildings and frontages can be extended or reduced accordingly.

a. **Task and Purpose.** A well-organized company defense in the urban area-

- Defeats the enemy's attack on the streets and city blocks by using obstacles and fire.
- Destroys the enemy by ambush and direct fire from prepared positions within defensible buildings.
- Clears the enemy from footholds or remains in place for a counterattack.

b. **Reconnaissance and Security.** The execution of the mission will be more effective if the terrain is reconnoitered and obstacles and fire lanes are prepared. The LP/OPs should be supplemented by patrols, mainly during periods of limited visibility, and wire communications should be used. Platoons should be given the mission to provide one LP/OP in order to provide spot reports concerning the size, location, direction and rate of movement, and type of enemy assaulting the company sector or battle position.

c. **Task Organization.** METT-TC factors will determine how the company will be task organized to accomplish the mission. A possible task organization might be:

(1) ***Rifle Platoons.*** Three platoons (one platoon minus a squad) occupy the defensive sector.

(2) ***Reserve.*** Detached squad from one of the rifle platoons. The reserve should be given priority of commitment missions such as reinforcing the fires of the defense, reacting to a danger on the flank, or counterattacking to throw the enemy from a foothold. The biggest threat to the company is for the enemy to gain a foothold and use it to begin clearing buildings. Any foothold should be counterattacked and the enemy must be quickly and violently expelled.

(3) ***Fire Support.*** Company 60-mm mortar and antitank weapons.

(4) ***Company Control.*** An engineer squad, with priority to the company obstacle plan, then reverts to company reserve. Engineers should be controlled at company level. They construct obstacles, prepare access routes, and assist in preparing defensive positions. Additional attachments or OPCON units, such as BFVs, tanks, and TOWs may be placed under company control. For example, a BFV Infantry element can be used to defend a sector or battle position. The BFVs can stay under the control of the platoon sergeant and support by fire and or conduct other missions as determined by the company commander. A platoon or section of tanks attached or OPCON to the company should provide heavy direct-fire support, engage enemy tanks, and support counterattacks. An attached or OPCON tank platoon can initially attack by fire and then revert to a mobile reserve role. The company executive officer can be used to control a reserve with multiple elements.

d. **Execution.** The defensive forces should ambush on the avenues of approach, cover the obstacles by fire, and prepare a strong defense inside the buildings. Counterattack forces should be near the front of the company sector in covered and concealed positions with an on order mission to counterattack. Rehearsals should be conducted both day and night. Counterattack forces should also be given specific instructions of what their actions will be after the enemy assault has been repelled; for example, stay in sector or revert back to reserve status.

L-16. DEFENSE OF KEY URBAN TERRAIN

An Infantry company may find itself having to defend key urban terrain. This defense may be part of defensive operations or may be an adjunct mission to stability and support operations. In many cases, this mission may be characterized by an unclear enemy situation and extremely restrictive ROE. The key terrain may be a public utility, such as gas, electrical, or water plants; a communications center, such as radio and or television; transportation center; a traffic circle; and so forth. When assigned a mission of this type, a company commander may often find his company having to defend a piece of terrain

that he would rather not have to occupy. Often the facilities previously described are sited for their centrality of location and convenience and not for the defensibility of the terrain.

a. **Task Organization.** The factors of METT-TC will determine the task organization of the company. Figure L-11 depicts an Infantry rifle company reinforced with an additional rifle platoon to defend the objective (water purification plant). Additional assets will be given to the company commander as they are requested or assigned, based on mission requirements and availability. In the situation depicted in Figure L-11, the organic weapons of the Infantry company are sufficient to accomplish the mission. The only additional requirement was for another rifle platoon to defend the objective.

b. **Tasks.** In the situation shown in Figure L-11, the company commander has determined that in order to properly defend the objective, he needs to deploy platoons on the defensible terrain available. Therefore, he is defending urban terrain (left), high ground (top), and low vegetated terrain (right, bottom). Additionally, it may be necessary to perform some of the tasks listed below:

- Provide inner and outer security patrols.
- Conduct counterreconnaissance.
- Establish LP/OPs.
- Establish checkpoints and roadblocks.
- Conduct civilian control and evacuation.
- Conduct coordination with local authorities.
- Prevent collateral damage.
- Supervise specific functions associated with operation of the facility, such as water purification tests, site inspections, and so forth.

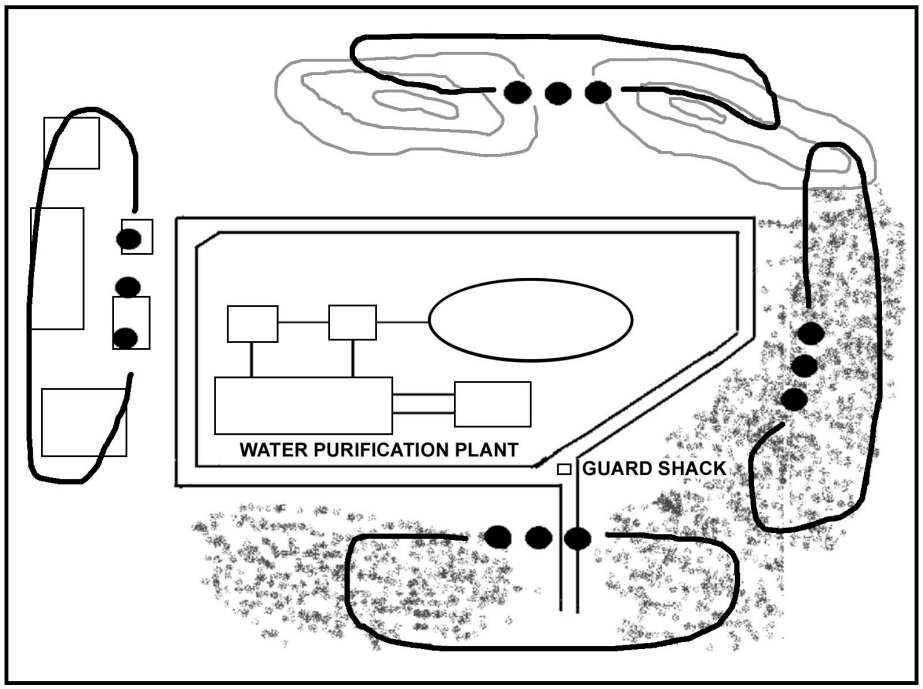

Figure L-11. Perimeter defense of key terrain

c. **Execution.** The company commander will normally deploy platoons in a perimeter around the objective in order to dominate key terrain and cover the mounted and dismounted avenues of approach into the objective. (See Chapter 5, paragraph 5-23, for further information.) Machine guns and antitank weapons will be emplaced to cover the dismounted and mounted avenues of approach into the objective, respectively. Wire obstacles will normally be used to restrict and deny entry into the objective area. Obstacles should be covered by fire and rigged with detection devices and trip flares. Antitank and command-detonated mines will be used consistent with the ROE. The company will have to be prepared to defend against a direct attack, such as a raid, or sabotage against key facilities within the objective, for example, water filtration system, pump station, and so forth. The commander will have to make an assessment as to the overall importance of the key facilities within the objective and prioritize security requirements. The 60-mm mortar section will be positioned to provide 360-degree fire support. The AT section will be positioned to engage vehicular targets. If the threat does not require the employment of mortars or AT weapons, these sections can be given other tasks.

d. **Other Considerations.** Depending on the mission requirements and threat, the company commander may have to consider the need for the following.

- Artillery and attack helicopter support.
- ADA assets to defend against air attack.
- Engineer assets to construct obstacles.
- Interpreters to assist in the functioning of the facility and operation of the equipment.
- MP, civil affairs, and or PSYOP assets for civilian control and liaison/ coordination with local police and or authorities.
- BFVs or tanks to act as a mobile reserve or reaction force, or integrated into the company plan.

e. **Force Protection.** The company may be required to conduct a perimeter defense as part of a force protection mission, such as defending a friendly base camp on urban terrain. The same techniques of establishing a perimeter defense would be used. The company will maintain the appropriate level of security (100, 50, 30 percent, etc.), consistent with the commander's plan and the enemy situation. Additional tasks may include:

- Setting up roadblocks and checkpoints.
- Searching individuals and vehicles prior to entry into the camp.
- Maintaining a presence as a show of force to the population outside the base camp.
- Conducting inner and outer security patrols.
- Clearing potential threats from any urban terrain that overwatches the base camp.
- Conducting ambushes to interdict any enemy forces moving towards the base camp.
- Restricting access to locations within the base camp. Conducting surveillance of these locations from within or from adjacent structures or positions.
- Conducting reaction force duties inside and outside the perimeter of the camp.

Note: See Appendix A and TC 7-98-1 for detailed information on roadblocks, checkpoints, and searches.

f. **Defense of a Traffic Circle.** An Infantry company may be assigned the mission of defending a key traffic circle in an urban area, or similar terrain, to prevent the enemy from seizing it or to facilitate movement of the battalion task force or other units (Figure L-12).

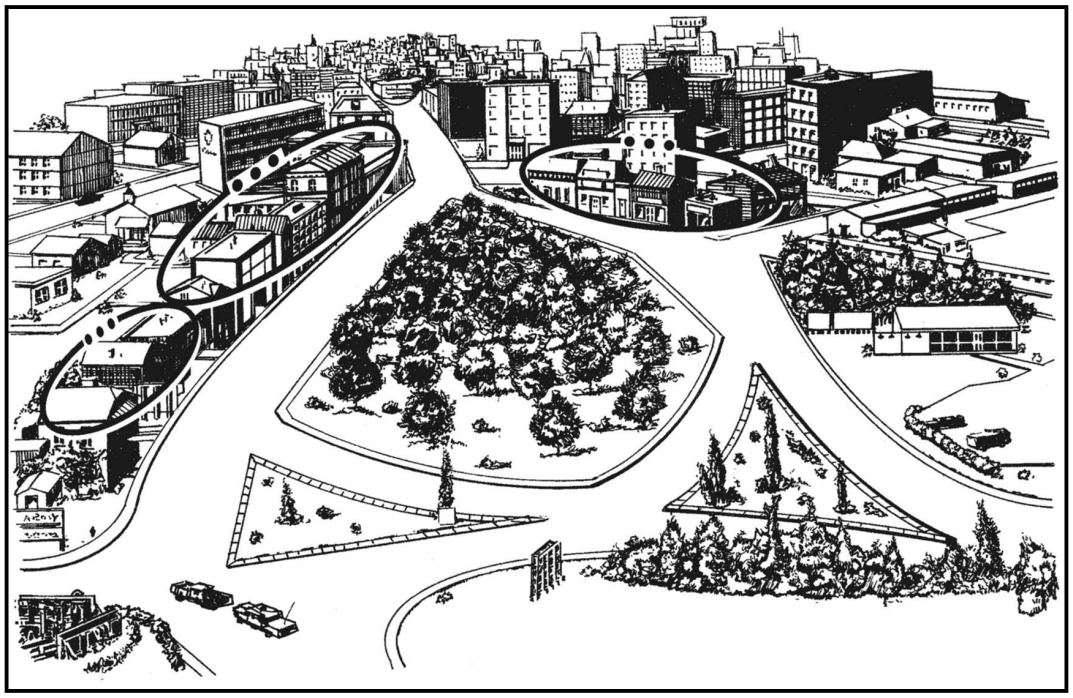

Figure L-12. Defense of a traffic circle.

(1) The company commander with this mission should analyze enemy avenues of approach into the objective and buildings that dominate those avenues. He should plan direct and indirect fires, consistent with the ROE, on to the traffic circle itself and on the approaches to it. He should also plan for all-round defense of the buildings that dominate the traffic circle to prevent encirclement. The company should prepare as many covered and concealed routes between these buildings as time permits. This makes it easier to mass or shift fires and to execute counterattacks.

(2) Obstacles can also deny the enemy the use of the traffic circle. Obstacle planning, in this case, must take into account whether friendly forces will need to use the traffic circle.

(3) Antitank weapons can fire across the traffic circle if fields of fire are long enough. Tanks should engage enemy armored vehicles and provide heavy direct-fire support for counterattacks. BFVs should engage enemy armored vehicles and provide direct fire to protect obstacles.

L-17. DEFENSE OF AN URBAN STRONGPOINT

See Chapter 5, paragraph 5-25 for information on defending an urban strongpoint.

L-18. DELAY

The intent of a delay is to slow the enemy, cause casualties, and stop him, where possible, without becoming decisively engaged. This is done by defending, disengaging, moving, and defending again. A company delay is normally conducted as part of the battalion task force's plan. The delay destroys enemy reconnaissance elements forward of the outskirts of the urban area, prevents the penetration of the urban area, and gains and maintains contact with the enemy to determine the strength and location of the main attack by trading space for time. Infantry companies are well suited for this operation, because they can take advantage of the cover and concealment provided by urban terrain and inflict casualties on the enemy at close range. Delays can be planned by assigning platoon battle positions, platoon sectors, or both. Figure L-13 depicts a company delay in urban terrain with the company commander assigning platoon battle positions. Routes are planned to each subsequent battle position or within the sector. Routes also are planned to take advantage of the inherent cover and concealment afforded by urban terrain, such as going through and hugging buildings, using shadows, subsurface areas, and so forth. (See Chapter 6, paragraph 6-9, for detailed information concerning delays.)

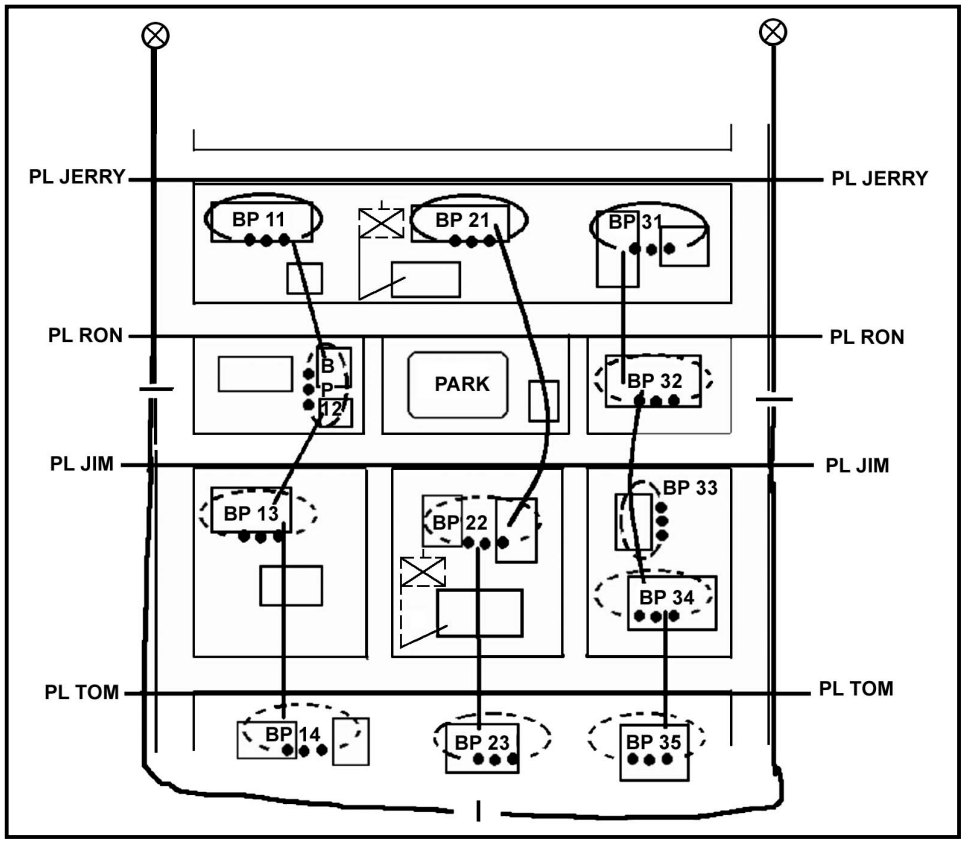

Figure L-13. Company delay in a urban area.

a. The company's sector should be prepared with obstacles to increase the effect of the delay. Engineers prepare obstacles on main routes but avoid some covered and concealed routes that are known by the friendly troops for reinforcement, displacement, and resupply. These routes are destroyed and obstacles are executed when no longer needed.

b. Antiarmor weapon systems, tanks, and BFVs should be positioned on the outskirts of the urban area to destroy the enemy at maximum range. They should be located in defilade positions or in prepared shelters. They fire at visible targets and then fall back or proceed to alternate positions. Platoons should be assigned sectors from 100 to 300 meters (one to two blocks) wide. If available, they should be reinforced with sensors or GSRs, which can be emplaced on the outskirts or on higher ground to attain the maximum range in the assigned AO. Platoons delay by detecting the enemy early and inflicting casualties on him using patrols, OPs, and ambushes and by taking advantage of all obstacles. Each action is followed by a disengagement and withdrawal. Withdrawals occur on covered and concealed routes through buildings or underground. By day, the defense is dispersed; at night, it is more concentrated. Close coordination and maintaining situational understanding are critical aspects of this operation.

Section IV. STABILITY AND SUPPORT

Companies may have to conduct operations in environments that do not involve traditional combat. A company may be called upon to conduct a stability or support contingency operation and then have to quickly transition into offensive or defensive missions. The company may also be utilized in a stability or support operation at the successful conclusion of a combat mission. When assigned a stability or support mission, a well-trained company must be able to rapidly shift its focus from war fighting to stability and support and also from stability and support to war fighting. During a stability or support operation, the company performs numerous activities. Essentially, the company accomplishes these activities through execution of tactical tasks, such as security patrols, establishing road blocks and check points, force protection, and so forth. The company normally operates as part of a battalion TF during the execution of stability and support operations. While stability and support operations can occur anywhere, they will most likely occur in an urban environment. (See Appendix A and TC 7-98-1 for additional considerations and TTP.)

L-19. STABILITY OPERATIONS

The purposes of stability operations are to—

- Protect national interests.
- Promote peace or deter aggression.
- Satisfy treaty obligations or enforce agreements and policies.
- Reassure allies, friendly governments, and agencies.
- Encourage a weak or faltering government.
- Maintain or restore order.
- Protect life and property.
- Demonstrate resolve.
- Deter or respond to terrorism.

- Reduce the threat of conventional arms and WMD to regional security.
- Eliminate or contain subversion, lawlessness, and insurgency.

a. **Considerations for Stability Operations.** Conducting stability operations is fundamentally identical to conducting combat operations. While each stability operation is different, the military decision-making process (MDMP) and troop-leading procedures methodologies apply. The considerations listed below supplement those processes and can help the company commander in developing the concept of the operation for stability operations.

- Understand the potential for unintended consequences of individual and small unit actions.
- Display the capability to use force without threatening the population.
- Act decisively to prevent escalation.
- Apply force selectively and discriminately.
- Stress force protection.
- Emphasize information gathering through surveillance and reconnaissance.

b. **Types of Stability Operations.** Table L-3 depicts the types of stability operations that a battalion TF may be called upon to conduct and the missions it will issue its subordinate companies/company teams in order to execute the stability operation(s).

TYPE	MISSIONS
Peace Operations	***Peacekeeping*:** employ patrols, establish checkpoints, roadblocks, buffer zones, supervise truce, EPW exchange, reporting and monitoring, negotiation and mediation, liaison, investigation of complaints and violations, civil disturbance missions, act as quick reaction force (QRF), and offensive and defensive missions. ***Peace Enforcement:*** separation of belligerents; establishment and supervision of protected zones, sanction enforcement, movement denial and guarantee, restoration and maintenance of order, area security, humanitarian assistance, civil disturbance missions, act as QRF, and offensive and defensive missions. ***Operations in Support of Diplomatic Efforts:*** military to military contacts, exercises, security assistance, restore civil authority, rebuild physical infrastructure, provide structures and training for schools and hospitals, and reestablish commerce.
Foreign Internal Defense	***Indirect Support:*** military to military contacts, exercises, area security. ***Direct Support:*** civil-military operations, intelligence and communications sharing, and logistical support. ***Combat Operations:*** offensive and defensive missions.
Support to Insurgencies	Show of force, defensive missions, raids, area security, employ patrols, and provide CSS.
Counterdrug Operations	Liaison and advisor duty, civic action, intelligence support, surveillance support, reconnaissance, logistical support, and information support.
Combating Terrorism	Conduct force protection, offensive and defensive missions.
Noncombatant Evacuation Operations	Attack to seize terrain that secures evacuees or departure area, guard, convoy security, act as QRF, delay, and defend. See FM 90-29.
Arms Control	Seize and destroy weapons, convoy escort, assist and monitor inspection of arms, and conduct surveillance.
Show of Force	Perform tactical movement, demonstration, defensive operations, and perform training exercises.

Table L-3. Types of stability operations, missions.

L-20. SUPPORT OPERATIONS

Support operations provide essential supplies and services to assist designated groups. They are conducted to help foreign and civil authorities respond to crises. Companies normally conduct support operations as part of a larger battalion operation to save or protect lives, reduce suffering, recover essential infrastructure, improve the quality of life, and restore situations to normal. Again, planning for support operations is fundamentally identical to planning for combat and stability operations. While each support operation is different, the military decision making process (MDMP) and troop leading procedures methodologies apply. Considerations that can assist the company commander in developing plans for support operations are:

- Provide essential support to the largest number of people.
- Coordinate actions with other agencies, as applicable (normally done by the battalion staff).
- Hand over to civilian agencies as soon as feasible.
- Conduct robust information operations.
- Secure the force.

a. **Types of Support Operations.** The two types of support operations are domestic support operations (DSO) and foreign humanitarian assistance (FHA). Companies conduct DSO in the US and its territories and FHA outside the US and its territories. Stand-alone FHA operations are conducted only in a permissive environment. In uncertain and hostile environments, companies conduct FHA operations as part of larger stability or offensive and defensive operations.

b. **Forms of Support Operations.** During DSO, companies perform relief operations, provide support to incidents involving WMD, provide support to law enforcement, and provide community assistance. In FHA, companies most often conduct relief operations; however, FHA may also involve support to incidents involving WMD and community assistance. Table L-4 depicts the more common missions that the battalion TF will assign to subordinate companies/company teams.

FORMS OF SUPPORT OPERATIONS	MISSIONS
Relief Operations	Search and rescue, food & water distribution, providing temporary shelter, transportation support, medical support, sanitation, area security.
Support to Incidents Involving WMD	Assisting law enforcement, area security, protection of critical assets (utilities, transportation, banking, telecommunications), responding to WMD casualties, establishing roadblocks/checkpoints.
Support to Civil Law Enforcement	Civil disturbance missions; support to counterterrorism and counterdrug operations; providing resources, training, and augmentation; assisting with cordon and search; security patrols; establish roadblocks and checkpoints.
Community Assistance	Search and rescue, fire fighting, assistance in safety and traffic control, emergency snow removal, providing temporary shelter.

Table L-4. Types of support operations, missions.

c. **Other Agencies.** Because of the nature of support operations, the company can expect to interact with other units and agencies such as engineers, MPs, and nongovernment organizations (NGOs). Support actions rely on a partnership with other government and nongovernment agencies. Liaison with these agencies and between local governments is critical. Regardless of the positive relationships built, force protection always remains a top priority.

L-21. TRANSITION TO COMBAT OPERATIONS

Stability, and to a lesser extent, support operations are missions that may transition to combat. The company commander must always keep in mind that the pendulum can also shift from a stability or support operation to combat. An escalation to combat is a clear indicator that the stability or support operation failed. The company must always retain the ability to conduct offensive and defensive operations. Preserving the ability to transition allows the company to maintain initiative while providing force protection.

a. **Plan for Contingencies.** The commander must plan for contingency operations that factor in what actions the company will perform if combat cannot be averted; for example, reverting to a hasty defense in the event that a stability or support mission deteriorates.

b. **Balanced Mindset.** A balance must be achieved between the mindset of peace operations and the mindset of war fighting. Soldiers can not become too complacent in their warrior spirit, but also must not be too eager to rely on the use of force to resolve conflict. This balance is the essence of peace operations and the fundamental aspect that will enable the company to perform its mission successfully and avoid an escalation to combat. Proactive leaders that are communicating and enforcing the ROE are instrumental to achieving this mindset.

c. **Combat Skills Training.** If the stability or support operation extends over prolonged periods of time, training should be planned that focuses on the individual and collective combat tasks that would be performed during transition to offensive and or defensive missions.

Section V. COMBAT MULTIPLIERS

The first and most fundamental lesson learned from recent operations in urban areas is the value of the fully integrated combined arms team. There is no denying the value of light Infantry forces during urban combat. However, urban combat never should be considered a pure Infantry task. Urban combat by units composed entirely of Infantrymen is a historical anomaly. Across the spectrum of combat action in urban areas, powerful combined arms teams produce the best results Infantry units operating alone suffer from critical shortcomings that can be compensated for only by appropriate task organization with mechanized Infantry, armor, and engineers. These teams must be supported by closely integrated aviation, fire support, communications, and logistical elements. This paragraph discusses the more common combat multipliers available to the Infantry company for the execution of UO.

L-22. ARMORED VEHICLES

See Appendix B for additional considerations and TTP.

a. **Capabilities.**

(1) The thermal sights on armored vehicles can detect enemy activity through darkness and smoke, conditions that limit even the best-equipped Infantry. They also provide greater range (4,000+ meters) in most instances.

(2) Armored forces, can deliver devastating fires, are fully protected against antipersonnel mines, fragments and small arms, and have excellent mobility along unblocked routes.

(3) Armored vehicles project a psychological presence, an aura of invulnerability that aids the friendly forces in deterring violence. Mounted patrols by armored vehicles can monitor large areas of a city while making their presence known to the entire populace, both friendly and unfriendly.

(4) BFVs can move Infantrymen rapidly to points where, together, they can dominate and isolate the cordoned area. Armored vehicles can also support troop convoy movements in wheeled vehicles. With their long-range sights and weapons, armored vehicles can dominate large expanses of open area and thus free Infantry to isolate closer terrain and visual dead space.

(5) The mobile protected firepower of armored vehicles can be used to add security to resupply convoys and to extract wounded personnel under fire. The armored vehicle's smoke grenade launcher capability can aid this and other small-unit actions.

b. **Limitations.**

(1) Crewmen in armored vehicles have poor all-round vision through their vision blocks; they are easily blinded by smoke or dust. Tanks cannot elevate or depress their main guns enough to engage targets very close to the vehicle or those high up in tall buildings.

(2) If isolated or unsupported by Infantry, armored vehicles are vulnerable to enemy hunter/killer teams firing light and medium antiarmor weapons. Because of the abundance of cover and concealment in urban terrain, armored vehicle gunners may not be able to easily identify enemy targets unless the commander exposes himself to fire by opening his hatch or Infantrymen directing the gunner to the target.

(3) Armored vehicles are noisy. Therefore, there is little chance of them arriving in an area undetected. Improvised barricades, narrow streets and alleyways, or large amounts of rubble can block armored vehicles.

(4) Due to the length of the tank main gun, the turret will not rotate if a solid object is encountered, for example, a wall, post, and so forth. Heavy fires from armored vehicles cause unwanted collateral damage or can destabilize basic structures.

(5) The main gun of an M1A2 can only elevate (+)20 degrees and depress (–)9 degrees. Examples of standoff distances for buildings where a HEAT round is used are:

- Ground floor—2.5 meters from the target.
- 3d story—23 meters from the target.
- 18th story—132 meters from the target.

Note: Figure L-14 shows the difference in the capabilities of the BFV and the M1 tank with regard to fields of fire on urban terrain. Note that the BFV can engage a target 9 to 10 stories high at 20 meters, whereas an M1 tank requires 90 meters. Although the tank main gun has these limitations, targets can be engaged by the M2HB and M240 machine guns that are part of the tank's weapon system.

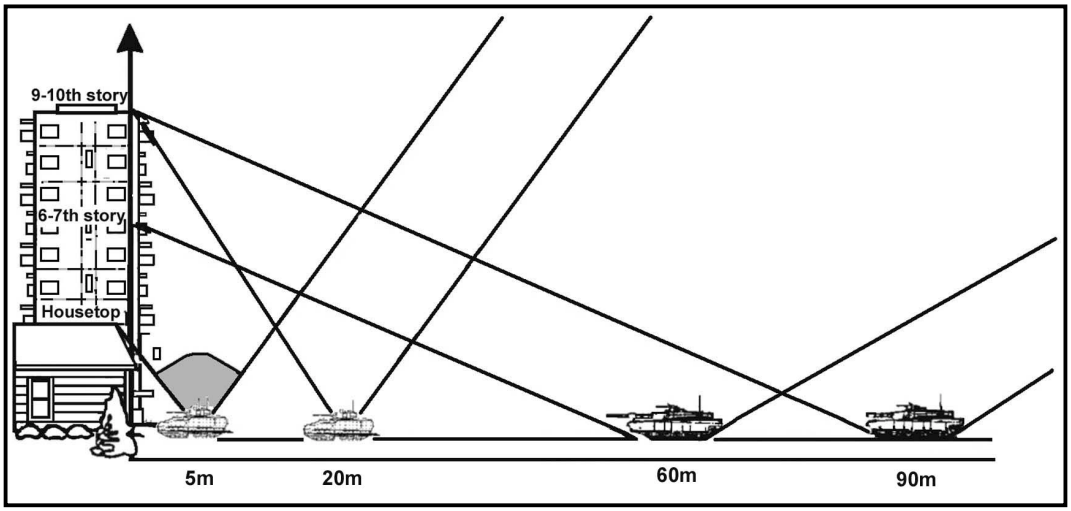

Figure L-14. Fields of fire on urban terrain.

c. **Employment.** Armored vehicles can support Infantry during urban combat operations by:

- Providing shock action and firepower.
- Isolating objectives with direct fire to prevent enemy withdrawal, reinforcement, or counterattack.
- Neutralizing or suppressing enemy positions with smoke, high explosive (HE), and automatic weapons fire as Infantry closes with and destroys the enemy.
- Assisting opposed entry of Infantry into buildings when doorways are blocked by debris, obstacles, or enemy fire.
- Smashing through street barricades or reducing barricades by fire.
- Obscuring enemy observation using smoke grenade launchers.
- Holding cleared portions of the objective by covering avenues of approach.
- Attacking by fire any other targets designated by the Infantry.
- Establishing roadblocks or checkpoints.
- Suppressing identified sniper positions.

Note: The information below refers to tank platoons. An attached or OPCON BFV platoon will have Infantry squads that can be employed in the scheme of maneuver. Therefore, platoon integrity with a BFV platoon should be maintained in urban combat and the BFV platoon should be used as a maneuver element.

d. **Task Organization at Company Level.** Normally, a tank platoon would be OPCON to a light, airborne, or air asssault Infantry company during combined arms operations at the company team level. There are four basic techniques of task organizing the tank platoon into the light Infantry company for urban combat.

(1) ***Tank Platoon as a Maneuver Element.*** In this technique, the tank platoon leader is responsible for maneuvering the tanks IAW the company team commander's intent.

With this task organization, likely missions for the tanks would be to support by fire or to overwatch the movement of the Infantry. This task organization is the most difficult to maneuver tanks with the Infantry. However, the tank platoon leader can choose to maneuver the platoon by sections in order to execute the mission. This would provide greater flexibility in supporting the Infantry during the close fight.

(2) ***Tank Sections Under Infantry Platoon Control.*** In this technique, tanks would be broken down into two sections and each section would be placed under the OPCON of an Infantry platoon, and maneuvered IAW the company team commander's intent. The company team commander relinquishes direct control of the tank maneuver to the Infantry platoon leaders. This technique is very effective in maintaining the same rate of progress between the tanks and the Infantry. However, Infantry platoon leaders are burdened with the additional responsibility of maneuvering tanks. The general lack of experience with tanks and the overall battlefield focus of the Infantry platoon leader can also affect this technique. This technique is best suited when contact with the enemy is expected and close continuous support is required for movement or clearing buildings.

(3) ***Tank Sections Under Company and Platoon Control.*** The tank platoon can be broken down into two sections, one under company control, the other under platoon control. The selected maneuver Infantry platoon would have a tank section available to support the close fight. With this technique, the company team commander has a tank section to deploy at the critical place and time of his choosing. This task organization still allows support to the Infantry close fight while keeping additional support options in reserve for the commander to employ. The disadvantages to this technique are that an Infantry platoon leader is maneuvering tanks, instead of the tank platoon leader, and the tanks directly available to the company team commander are cut in half. This must be accomplished by detailed planning, coordination, and rehearsals between the Infantry platoons and tank sections.

(4) ***Infantry Squad(s) Under Tank Platoon Control.*** In this technique, the company team commander has the option of placing one or more Infantry squads under the OPCON of the tank platoon leader. He may also retain all tanks under the control of the tank platoon leader or place a tank section under the OPCON of an Infantry platoon leader. This technique will give the company team commander a fourth maneuver platoon, and involves the tank platoon leader in the fight. It can work well in a situation where a mobile reserve that needs Infantry protection is required. This must be accomplished by detailed planning, coordination, and rehearsals between the Infantry squads and tank platoon/sections.

(5) ***Guidelines.*** None of the techniques described above are inherently better than the other. The task organization has to be tailored to accomplish the mission. Regardless of the technique selected, the guidelines below should be followed:

(a) Tanks should be used as sections. Single tanks may operate in support of Infantry, however it is preferable for tanks to operate as sections. If using tanks to shield squads and teams from building to building as part of the maneuver plan, the leader of the forward element needs to control the tanks.

(b) If the company commander is controlling the tanks, he needs to move forward to a position where he can effectively maneuver the tanks in support of the Infantry.

(c) The task organization should support the span of control. If the company commander is going to control the tanks, then there is no reason to task-organize the tanks by section under Infantry platoons.

(d) Tanks need Infantry support when the two elements are working together. Do not leave tanks alone because they are not prepared to provide local security during the operation. Tanks are extremely vulnerable to dismounted attack when operating on urban terrain.

L-23. ENGINEERS

Normally an engineer squad will be attached to an Infantry company. Most engineer manual-labor tasks (for example, preparing fighting positions) will have to be completed by Infantry units, with reinforcing engineer heavy-equipment support and technical supervision.

a. **Offensive Missions.** Engineers may perform the following missions during offensive operations in an urban area:

- Conduct a technical reconnaissance to determine the location and type of enemy obstacles and minefields, and to make breaching recommendations.
- Clear barricades and heavy rubble with earth-moving equipment or explosives to assist forward movement.
- Use explosives to destroy fortifications and strongpoints that cannot be reduced with the maneuver unit's organic assets.
- Use engineer equipment, if available, to destroy structures or to clear rubble.
- Lay mines to protect flanks and rear areas.
- Conduct mobility operations (gap crossing).
- Locate and remove mines that may hamper the unit's movement.
- Conduct breaching operations.
- Conduct route reconnaissance.

b. **Defensive Missions.** Engineers may perform the following missions during the defense of an urban area.

- Construct complex obstacle systems.
- Rubble buildings.
- Lay mines.
- Develop and provide mine/obstacle overlays to leaders.
- Assist in the preparation of defensive positions and strongpoints.
- Maintain counterattack, communications, and resupply routes.
- Enhance movement between buildings, catwalks, bridges, and so on.
- Crater roads.
- Clear fields of fire.
- Fight as Infantry, when needed.

c. **Defense Against Armor**. In defensive situations, when opposed by an armor-heavy enemy, priority should be given to the construction of antiarmor obstacles throughout the urban area. Use of local materials, where possible, makes obstacle construction easier and reduces logistics requirements. Streets should be barricaded in front of defensive positions at the effective range of antitank weapons. These weapons are used to increase the destruction by antiarmor fires, to separate enemy Infantry from

their supporting tanks, and to assist in the delay and destruction of the attacker. Antitank mines in and around obstacles and covered by fires, help synchronize a defensive fire plan.

L-24. FIELD ARTILLERY

Appropriate fire support coordination measures should be carefully considered since fighting in urban areas results in opposing forces fighting in close combat. When planning for fire support in an urban area, the company commander, in coordination with his FIST chief, should consider the following:

a. Target acquisition may be more difficult because of the increased cover and concealment afforded by the terrain. Ground observation is limited in urban areas, therefore FOs should be placed high. Adjusting fires is difficult since buildings block the view of adjusting rounds; therefore, the lateral method of adjustment may be most useful.

b. Initial rounds are adjusted laterally until a round impacts on the street perpendicular to the FEBA. Airburst rounds are best for this adjustment. The adjustments must be made by sound. When rounds impact on the perpendicular street, they are adjusted for range. When the range is correct, a lateral shift is made onto the target and the gunner fires for effect.

c. Special consideration must be given to shell and fuze combinations when effects of munitions are limited by buildings.

(1) Careful use of VT is required to avoid premature arming.

(2) Indirect fires may create unwanted rubble and collateral damage.

(3) The close proximity of enemy and friendly troops requires careful coordination.

(4) WP may create unwanted fires and smoke.

(5) Fuze delay should be used to penetrate fortifications.

(6) Illumination rounds can be effective; however, friendly positions should remain in shadows and enemy positions should be highlighted. Tall buildings may mask the effects of illumination rounds.

(7) VT, TI, and ICM are effective for clearing enemy positions, observers, and antennas off rooftops.

(8) Swirling winds may degrade smoke operations.

(9) Scatterable mines (SCATMINE) may be used to impede enemy movements. SCATMINE effectiveness is reduced when delivered on a hard surface.

d. Target acquisition is difficult in urban terrain because the enemy has many covered and concealed positions and movement lanes. The enemy may be on rooftops and in buildings, and may use sewer and subway systems. Aerial observers are extremely valuable for targeting because they can see deep to detect movements, positions on rooftops, and fortifications. Targets should be planned on rooftops to clear away enemy FOs as well as communications and radar equipment. Targets should also be planned on major roads, at road intersections, and on known or likely enemy positions. Employing artillery in the direct fire mode to destroy fortifications should be considered, especially when assaulting well prepared enemy positions. Also, restrictive fire support coordination measures, such as a restrictive fire area or no-fire area may be imposed to protect civilians and critical installations.

e. 155-mm self-propelled howitzers are effective in neutralizing concrete targets with direct fire. Concrete-piercing 155-mm rounds can penetrate 36 inches of concrete at

ranges up to 2,200 meters. The mounted .50-caliber machine gun can also be used as direct fire support. This howitzer must be closely protected by Infantry when used in the direct-fire mode, since the howitzers do not have any significant protection for their crews.

f. Forward observers must be able to determine where and how large the dead spaces are. This area is a safe haven for the enemy because he is protected from indirect fires. For low-angle artillery, the dead space is about five times the height of the building. For high-angle artillery, the dead space is about one-half the height of the building.

g. Aerial observers are effective for seeing behind buildings immediately to the front of friendly forces. They are extremely helpful when using the ladder method of adjustment because they may actually see the adjusting rounds impact behind buildings. Aerial observers can also relay calls for fire when communications are degraded due to power lines or masking by buildings.

h. Radar can locate many artillery and mortar targets in an urban environment because of the high percentage of high-angle fires. If radars are sited too close behind tall buildings, some effectiveness will be lost.

i. The use of airburst fires is an effective means of clearing snipers from rooftops. HE shells with delay fuzes may be effective against enemy troops in the upper floors of buildings, but, due to the overhead cover provided by the building, such shells have little effect on the enemy in the lower floors.

L-25. MORTARS

Mortars are the most responsive indirect fires available to company commanders. Their mission is to provide close and immediate fire support to the maneuver units. Mortars are well suited for combat in urban areas because of their high rate of fire, steep angle of fall, and short minimum range. Company commanders must plan mortar support with the FIST chief as part of the total fire support system. (See FM 7-90 for detailed information on the tactical employment of mortars.)

a. **Role of Mortar Units.** The role of mortar units is to deliver suppressive fires to support maneuver, especially against dismounted Infantry. Mortars can be used to obscure, neutralize, suppress, or illuminate during urban combat. Mortar fires inhibit enemy fires and movement, allowing friendly forces to maneuver to a position of advantage. The most common and valuable use for mortars is often harassment and interdiction fires. One of their greatest contributions is interdicting supplies, evacuation efforts, and reinforcement in the enemy rear just behind his forward defensive positions. During both World War II and recent Middle East conflicts, light mortar HE fires have been used extensively during urban combat to deny the use of streets, parks, and plazas to enemy personnel. Finally, mortars can be used, with some limitations, against light armor and structures. Effectively integrating mortar fires with dismounted maneuver is key to successful combat in an urban area.

b. **Position Selection.** The selection of mortar positions depends on the size of buildings, the size of the urban area, and the mission. Rubble can be used to construct a parapet for firing positions. Positions are also selected to minimize counterbattery fire.

(1) ***Existing Structures and Masking.*** The use of existing structures (for example, garages, office buildings, or highway overpasses) for positions is recommended to afford maximum protection and minimize the camouflage effort. Proper masking can enhance

survivability. If the mortar has to fire in excess of 885 mils to clear a frontal mask, the enemy counterbattery threat is reduced. These principles can be used in both the offense and the defense.

(2) ***Use of Sandbags.*** Mortars should not be mounted directly on concrete; however, sandbags may be used as a buffer. Sandbags should consist of two or three layers; be butted against a curb or wall; and extend at least one sandbag width beyond the baseplate.

(3) ***Placement.*** Mortars are usually not placed on top of buildings because lack of cover and mask makes them vulnerable. They should not be placed inside buildings with damaged roofs unless the structure's stability has been checked. Overpressure can injure personnel, and the shock on the floor can weaken or collapse the structure.

c. **Communications.** Initially, radio may be the primary means of communication during urban combat. An increased use of wire, messenger, and visual signals will be required. However, wire should eventually be the primary means of communication between the forward observers, fire support team, fire direction center, and mortars since elements are close to each other. Also, FM radio transmissions in urban areas are likely to be erratic. Structures reduce radio ranges; however, placing antennas on upper floors or roofs may improve communications and enhance operator survivability. Another technique that applies is the use of radio retransmissions. A practical solution is to use existing civilian systems to supplement the unit's capability, understanding that this method of communication is not secure.

d. **Magnetic Interference.** In an urban environment, all magnetic instruments are affected by surrounding structural steel, electrical cables, and automobiles. Minimum distance guidelines for the use of the M2 aiming circle (FM 23-90) will be difficult to apply. To overcome this problem, an azimuth is obtained to a distant aiming point. From this azimuth, the back azimuth of the direction of fire is subtracted. The difference is indexed on the red scale and the gun manipulated until the vertical cross hair of the sight is on the aiming point. Such features as the direction of a street may be used instead of a distant aiming point.

e. **High-Explosive Ammunition.** During urban combat, mortar HE fires are used more than any other type of indirect fire. Although mortar fires are often targeted against roads and other open areas, the natural dispersion of indirect fires will result in many hits on buildings. Leaders must use care when planning mortar fires during UO to minimize collateral damage.

(1) High-explosive ammunition, especially the 120-mm projectile, provides good results when used against lightly built structures within cities. However, it does not perform well against reinforced concrete found in larger urban areas.

(2) When using HE ammunition in urban fighting, only point-detonating fuzes should be used. The use of proximity fuzes should normally be avoided, because the nature of urban areas causes proximity fuzes to function prematurely. Proximity fuzes, however, are useful in attacking some targets, such as OPs, on tops of buildings.

f. **Illumination.** Based on the close nature of urban combat, consideration should be given to the use of infrared (IR) illumination if the factors of METT-TC permit its use and friendly forces have a technological advantage over the enemy in terms of night vision devices (NVDs). Both IR and standard illumination rounds may cause unwanted urban fires if they come in contact with flammable structures or materials. Planning considerations must also include building height and the probability of rounds drifting

and making contact with the sides of buildings, thus reducing their effectiveness. In some cases, ground burst may be more advantageous. In the offense, illumination rounds are planned to burst above the objective. If the illumination were behind the objective, the enemy troops would be in the shadows rather than in the light. In the defense, illumination is planned to burst behind friendly troops to put them in the shadows and place the enemy troops in the light. Buildings reduce the effectiveness of the illumination by creating shadows. Continuous illumination requires close coordination between the FO and FDC to produce the proper effect by bringing the illumination over the defensive positions as the enemy troops approach the buildings.

g. **Special Considerations.** When planning the use of mortars, commanders must consider the following:

(1) FOs should be positioned where they can get the maximum observation so target acquisition and adjustments in fire can best be accomplished. This is not necessarily on tops of buildings

(2) Commanders must understand ammunition effects to correctly estimate the number of volleys needed for the specific target coverage. Also, the effects of using WP may create unwanted smoke screens or limited visibility conditions that could interfere with the tactical plan.

(3) FOs must be able to determine dead space in urban terrain. Dead space is the area in which indirect fires cannot reach the street level because of buildings. This area is a safe haven for the enemy. For mortars, the dead space is about one-half the height of the building.

(4) Mortar crews should plan to provide their own security.

(5) Commanders must give special consideration to where and when mortars are to displace while providing immediate indirect fires to support the overall tactical plan. Combat in urban areas adversely affects the ability of mortars to displace because of rubbling and the close nature of urban combat.

L-26. HELICOPTER SUPPORT

a. **Attack Helicopters.** Infantry units may be supported by a variety of attack helicopters ranging from fully modernized AH-64s to lightly armed but agile OH-58Ds. Regardless of the specific type of attack helicopter available, the same missions and tasks can be accomplished due to the inherent flexibility of Army aviation units. Due to the increased risk of small arms and man-portable air defense systems (MANPAD) engagements, aviation forces normally support UO by operating away from urban areas (for example, isolation of objective); however, if the risk analysis determines that the payoff is higher than the risk, aviation forces can be employed in and around the urban area.

(1) ***Common Missions.*** The most common missions assigned to attack helicopters during urban operations are the following:

- Escort of troop-carrying aircraft during air assaults.
- Overwatch and support attacks integrated with the ground commander's maneuver.
- Interdiction and destruction of enemy armored vehicles moving against friendly forces.
- Isolation of urban objectives.

- Reconnaissance.
- Security of friendly locations.
- Convoy escort duty.
- Precision engagement of hardened point targets.
- Participation in show-of-force operations.
- Escort of NEO mission aircraft.

(2) ***Other Missions.*** In addition to the missions listed above, attack helicopters may be called on to perform some additional, nontraditional roles during urban operations. This is particularly true during support operations and stability operations in urban areas. Additional missions may include the following:

- Assisting, for limited periods, in the control and coordination of fires with the maneuver of ground forces.
- Providing limited relay of radio messages from isolated ground units.
- Marking or identifying specific buildings and areas by smoke, fires, or targeting lasers.
- Videotaping routes or objectives for later analysis by ground commanders.
- Providing navigational and directional assistance to ground units.
- Providing limited area illumination by infrared or white light using either on-board sources or illumination rockets.
- Providing countersniper and countermortar armed reconnaissance patrols around friendly unit locations.

(3) ***Weapons Limitations.*** Urban terrain limits weapons employment.

(a) Weapons use may be limited by the short arming/slant ranges within the urban area. Precision weapons, such as Hellfire missiles, require about 500 meters minimum range to reliably arm and stabilize on the intended target. Often, fire from longer ranges actually improves accuracy. The shaped charge of the Hellfire produces less damage and over-pressurization than the TOW's high-explosive round, when fired against buildings. Window engagements are generally not recommended, since the missile will usually impact the far wall of the structure, expending its blast energy away from the structure. Missile impact on the facing structure will normally cause over-pressurization inside the structure (near impact) as well as secondary fragmentation of wood/concrete, which can neutralize or stun occupants in the vicinity of the impact.

(b) Extensive use of precision weapons by several units in close proximity may cause coordination problems with target identification and designation.

(c) Laser designation by both ground and aerial systems may be degraded by the large expanses of polished, flat reflective surfaces common in many urban areas. The high volumes of smoke and dust associated with burning buildings and urban combat can prevent the accurate laser designation required for precision engagements.

(d) Aircraft cannon fire against buildings can be devastating. These fires provide excellent suppression and can drive enemy forces away from firing positions or fix the enemy in place until ground maneuver forces can destroy him. Enemy positions that have been struck by fire can normally be reoccupied quickly by the enemy. Ricochets from these rounds are common in urban structures. They can cause additional collateral damage and pose a danger to nearby friendly forces.

(e) Target identification and marking may be difficult because of heavy smoke and dust rising from urban fires and explosions. Some smoke from fires in industrial areas

may be highly toxic or irritating. Pilots may have to don chemical protective equipment that hinders target detection and engagement. Friendly unit locations and personnel can be marked with colored panels, glint tape, strobe lights, and colored smoke. Targets can be marked with infrared laser pointers, such as the GCP-1 Ground Commander Pointer/Illuminator, colored M203 smoke rounds, M203 or mortar flares burning on the ground, or tracer fires. In some situations, improvised spotlights can also be used.

(f) Although fire from stationary positions is more accurate, running fire is normally safer for the aircraft due to enemy ground fire. If possible, ground commanders should avoid directing pilots along a gun-target line that passes over friendly troops. Gun-target runs that are perpendicular to the friendly unit's front are normally best.

(g) 2.75 rockets (area fire) with HE warheads have a burst radius in excess of 50 meters and are effective in the destruction of C4 structures, thin-skinned vehicles, and ADA and can damage/breach concrete and wood structures. But, when fired in pairs or more, the rockets have a large dispersion pattern and pose a potential accuracy and fratricide problem.

b. **Assault and Lift Helicopters.** Infantry units may be supported by a variety of assault or lift helicopters, normally the UH-60 or CH-47. These assets can be crucial for the flexible and responsive movement of troops and supplies and C2.

(1) ***Common Missions.*** The most common missions assigned to assault/lift helicopters during urban operations are the following:

- Air assaults.
- CASEVAC/MEDEVAC.
- Air movement of troops and supplies.
- Emplace logistical resupply points.
- Conduct C2 operations.
- Conduct NEO.

(2) ***Other Missions.*** Assault/lift helicopters may be called on to perform some additional, nontraditional roles or roles requiring special mission equipment. Additional missions may include the following:

- Conduct EW operations.
- Combat search and rescue (CSAR).
- Emplace Volcano mines.
- Emplace large/heavy obstacles (abandoned vehicles, concrete dividers, and so on).

c. **Aircraft Power Limitations and Time on Station.** The need to deliver hovering fires from temporary battle positions may require the aircraft to carry less than a full load of munitions or fuel. This is especially true in hot climates and high altitudes. Reduced loads mean more frequent trips to forward area refuel and rearm points and less time on station. Long route distances during air movements may require the establishment of forward arming and refuel points (FARP) along the route prior to operations. Climate will also affect the number of troops or amount of supplies the aircraft can transport.

d. **Command and Support Relationships.** From the ground unit perspective, helicopters are most effective when they operate under the OPCON of the ground unit commander closest to the enemy. Normally, the Infantry battalion is the lowest level granted formal OPCON of helicopters. During attack helicopter operations, the Infantry battalion commander is rarely able to identify the precise location of enemy forces or to

coordinate aerial fires with friendly squad and platoon maneuver. He often must pass the responsibility for close coordination of attack helicopter fires to the company commander or platoon leader on the scene. This ground maneuver leader can direct the efforts of only a few aircraft at a time. It may be more effective for the aviation unit to retain control of its individual aircraft and operate by continuously rotating attack helicopter elements into the battle area where they then coordinate their attacks with the ground commander's maneuver. Generally, the smaller and more decentralized the combat actions, the better it is to have armed aircraft coordinate directly with the small-unit leader on the ground. The larger, more centralized the combat action, the better it is to retain control of armed aircraft by the aviation headquarters. Whichever command and support relationship is chosen, both the ground and the aviation headquarters must understand what is expected of the other. Close liaison and clear, concise verbal communications are important.

L-27. ANTIARMOR WEAPONS

The urban environment will not change the tactical use of these weapons, but it can limit how they are employed. Some of those limitations are: stand-off; obstructions for wire-guided missiles; displacement after engagements; firing in-depth engagements; increased obstacles; increased danger zones; and all around security. Although antiarmor weapons are primarily designed to destroy armored vehicles, they also can be used to damage or destroy some urban fortifications. Additionally, they can be used for ballistic breaching of doorways that are being used for entry points to buildings, or by creating deceptions, just before the assault element enters the actual initial breach (entry) point. The larger systems that have highly magnified day and thermal sights can be used to detect snipers and to disrupt or kill them with long range missiles. Most medium and heavy antiarmor weapons have their own local security since they are crew served, thus eliminating the need to assign additional security. Commanders should ensure platoon leaders emplace the weapons in a mutually supporting manner that also provides all round security for the antiarmor weapons. When these weapons fire, they quickly become priority targets, making them susceptible to enemy fire. Major considerations for planning offensive and defensive operations are as follows.

a. **Offensive Operations.** When employing antiarmor weapons in the offense, assign them to an area that over watches the assault force and where ambushes are likely, such as roads, road intersections, alleys, and large open areas. Place them so they can establish a blocking force along main access routes to the objective and where they can isolate the objective against armor counterattacks. When selecting positions, pick the areas that-

- Offer cover and concealment for the weapon and crew. Urban terrain will, in most cases, limit maximum range shots, making the weapon and crew more vulnerable to small arms weapons.
- Have no ground and overhead obstacles.
- Provide mutual support with other crew-served weapons.
- Offer escape routes.

Note: Overhead wire obstructions are the main concern when firing guided missiles. Wire obstacles will be prevalent throughout urban areas causing problems with in flight missiles, wire guided missiles, and rockets. Overhead wires can deflect

guided missiles from their flight path when their control fins make contact with the wire. Firing a wire-guided missile over power lines can burn the tracking wires, causing the loss of the missile, and, possibly, causing damage to the weapon system and crew. Most missiles are armed 50 meters or more from the weapon.

b. **Defensive Operations.** When assigning the antiarmor weapons their engagement areas, ensure that they are positioned for maximum fields of fire. They are also positioned in-depth to exploit their maximum ranges. This may not always be possible within urban areas, with the amount of obstacles and short engagement ranges. Close engagement areas that limit standoff will only give the crew time for one shot, with no time for reloading if they have to fire multi-engagements. For this reason, antiarmor weapons should always be employed in pairs. One fires and the other supports by fire. When selecting firing positions consider:

- Positioning the weapons so they have interlocking fires.
- When engaging armor or light armor, have the antiarmor fire first, giving the crew time to displace for other engagements.
- Use organic weapons to mask the initial engagement to distract the threat from knowing where the round or rounds came from.
- Establishing ambushes along choke points. Light antiarmor weapons that are individually operated work best at short ranges.

c. **TOW.** No TOW systems are organic to light Infantry companies. They may be attached down to company and platoon levels. All BFV platoons have organic TOWs on each BFV. These weapon systems are used to defeat heavy or light armor threats from outside or inside the urban area, in lieu of assigned armored vehicles. They cannot apply the same amount of firepower as tanks but, when employed in pairs, they can destroy and disrupt armored units long enough to give commanders time to bring other assets into play. The TOW can engage targets at a range of 3,750 meters using a 13X day sight or thermal sight.

(1) ***Advantages:*** Some of the advantages of the TOW system are:

(a) Offers greater range, accuracy, and lethality than other antiarmor weapons.

(b) Will destroy all known armor vehicles.

(c) Gives leaders far-seeing OP capabilities day or night using the AN/TAS 4 12X day or night 24X zoom thermal sight.

(d) The HMMWV TOW carrier has an M2 .50 caliber machine gun or MK 19 grenade launcher for crew safety, and can be used against dismounted enemy troops. This gives the leader a two-fold weapon when used to over watch assault elements or when isolating buildings.

(e) The HMMWV carrier has a HIMS (HMMWV interchangeable mount system) that allows the TOW system to be in a ready-to-fire configuration with the addition of the M249 or the M2 .50 caliber also mounted. The HIMS can also mount an M19 grenade launcher but not at the same time as the TOW.

(f) The TOW system can assist in detecting enemy snipers and destroy or disrupt them. When engaging a sniper in a building, aim at the wall next to the window or fortified position he is firing from. The structure will set off the missile warhead, causing inner spalling of the wall and tremendous heat within the room. If a missile is fired

through a window and impacts on a back wall, debris and heat from the explosion will permeate the room.

(2) ***Disadvantages.*** Some of the disadvantages of the TOW system are:

(a) The missile is wire guided, which restricts firing from elevated positions where power lines cross the engagement areas.

(b) The crew is vulnerable to small arms fire when mounted on the HMMWV carrier.

(c) The missile has a noticeable firing signature that can give away positions.

(d) The missile has dangerous backblast areas that restrict firing inside of structures.

d. **Javelin.** The Javelin is a crew-served, medium range, fire-and-forget system. Unlike conventional wire-guided missiles, the Javelin automatically guides itself to the target after launch. Soldiers can reposition immediately after firing or reload to engage another threat. The Javelin has two attack modes, the top attack and the direct attack. The Javelin sight uses passive surveillance, day or night, at ranges of 2,000 meters, in most weather conditions.

(1) ***Advantages.*** Some of the advantages of the Javelin are:

(a) Has a soft launch design, which allows it to be safely fired from inside buildings or covered fighting positions.

(b) Will destroy all known armored vehicles.

(c) Gives leaders far-seeing OP capabilities day or night using the 4X day sight and 4X and 9X thermal sight

(d) Offers more range, accuracy, and lethality, than the Dragon.

(e) Fire-and-forget, with no attached wires.

(f) In lieu of the TOW, the Javelin can assist in locating enemy snipers and destroy or disrupt them. When engaging a sniper in a building, aim at the wall next to the window or fortified position he is firing from. The structure will set off the missile warhead, causing inner spalling of the wall and tremendous heat within the room. If a missile is fired through a window and impacts on a back wall, debris and heat from the explosion will permeate the room.

(2) ***Disadvantages.*** Some of the disadvantages of the Javelin are:

(a) Overhead wires can impede the missile flight.

(b) The missile requires a large overhead clearance from launch point to target.

e. **Dragon.** The Dragon is a crew-served medium range antiarmor weapon that can be employed to track and engage targets at a range of 1,000 meters, with a 4X day sight or 4X thermal sight.

(1) ***Advantages.*** Some of the advantages of the Dragon are:

(a) Will destroy most armored vehicles.

(b) Can track and engage targets day or night.

(2) ***Disadvantages.*** Some of the disadvantages of the Dragon are:

(a) System is wire guided, which restricts firing from elevated positions where power lines cross the engagement areas.

(b) It has noticeable firing signatures that can give away positions.

(c) It has dangerous backblast areas that restrict firing inside structures.

L-28. SNIPERS

Company commanders can make effective use of snipers during UO. They should be considered an important combat multiplier, and integrated into the fire plan and scheme of maneuver. Snipers are a precision weapon and must be used as such.

a. **Missions.** Snipers can be used as part of the support element to provide precise long and short range fires. Snipers can provide significant input to reconnaissance and counterreconnaissance efforts. They can be dedicated to the countersniper role or be assigned priority targets. Snipers can also overwatch breaching operations and call for indirect artillery fires. They can also be used effectively as a screening force against limited threats.

b. **Positions.** General areas (a building or group of buildings) are designated as sniper positions, but the sniper selects the best position for engagement based on the mission given him. Masonry buildings that offer the best protection, long-range fields of fire, and all-round observation are preferred. The sniper also selects several secondary and supplementary positions to cover his areas of responsibility. The sniper selects positions that provide him with engagement areas but do not compromise his security. He selects positions that allow him to displace to other firing positions.

c. **Targets**. Engagement priorities for snipers are determined by the relative importance of the targets to the effective operations of the enemy. Priority targets can include:

- Enemy officers or other leaders.
- Enemy snipers.
- Enemy RTOs.
- Vehicle commanders or drivers.
- Enemy crew served weapons members.
- Enemy special weapons personnel (engineers, ADA, and so forth).

If available, the XM107 .50-caliber heavy sniper rifle (HSR) can provide snipers with an antimateriel capability and improve countersniper effectiveness. The HSR is also an excellent weapon for penetrating sandbag barriers and most urban construction materials. Possible targets that can be engaged are:

- Radar systems.
- Missile systems.
- Fuel distribution systems.
- Aircraft (stationary, fixed, or rotary winged).
- Communications equipment.
- Generators.
- Light-skinned vehicles.

d. **Limitations.** Urban areas often limit snipers to firing down or across streets, but open areas permit engagements at longer ranges. Snipers can be employed to cover rooftops, obstacles, dead space, and gaps in FPFs.

e. **Countersniper TTP.** If the Infantry company operates in an area where enemy sniper contact is likely, the commander should consider the following:

(1) Task organize trained snipers by placing them into platoons most likely to make contact and give them counter-sniper missions.

(2) Identify trained unit marksmen to act in the counter-sniper role.

(3) Plan movement on the most covered and concealed routes.

(4) If operating with BFVs or tanks, place them in a position during movement that can support the Infantry in countersniper actions. The target acquisition capabilities of armored vehicles make them excellent countersniper weapons.

(5) Plan passive countermeasures and enforce them. (Ensure that soldiers wear protective equipment and request additional smoke.)

(6) Request additional 40-mm HE ammunition, 7.62-mm ammunition, AT4s, LAWs, and so forth, consistent with the ROE, METT-TC, and load planning considerations.

L-29. SERVICE SUPPORT.

The company first sergeant and supply sergeant normally share the responsibility for coordinating all supply and transportation requirements for the company. Generally, the priorities of resupply for Infantry companies in urban combat are ammunition, medical supplies, water, and food. These priorities may change based on the factors of METT-TC. Resupply operations normally occur once a day during periods of limited visibility. Company resupply is primarily a "push" system accomplished through the reception of a logistics package (LOGPAC) from battalion.

a. **Distribution of Supplies.** The first sergeant takes control of LOGPACS at the logistics release point (LRP). This should be a covered and concealed position that offers protection to those distributing supplies; for example, a large enough building that can be secured locally. The LRP should be positioned close enough to the combat area so that LOGPACs can be off-loaded and carried to the platoons. LOGPACS should be broken down into 50- to 75-pound loads to be carried in rucksacks. Litters can be used to carry heavier loads. The company should plan for carrying supplies and identify soldiers to do this. The platoon sergeant assumes control of the supplies once they arrive in the platoon area. Carrying parties should use covered and concealed routes through buildings to move from the LRP to the company sector. Porters should be prepared to provide their own security to and from the LRP. The first sergeant has three options for resupplying the platoons:

(1) ***In Position.*** This is the most common technique used in urban terrain when the company is conducting operations that require platoons to maintain combat power forward (during contact or when contact is imminent). For example, this technique would probably be used during the consolidation and reorganization phase of an offensive operation where a counterattack is expected. Ammunition, medical supplies, and water are brought forward by the support element and resupplied directly to the platoons in cleared buildings. All the assaulting platoons remain in position.

(2) ***Out of Position.*** This technique is used when the situation does not necessitate all combat power being forward (contact is not likely). The first sergeant establishes a resupply point in a covered and concealed position (a cleared building with overhead cover) to the rear of the platoon. Platoons send selected personnel back to the resupply point, pick up the supplies, and move back to position.

(3) ***Pre-position.*** This technique is most often used during defensive operations when supplies are often cached (pre-positioned and concealed) in buildings throughout the company sector or subsequent battle positions.

b. **Medical Treatment and Evacuation**. The first sergeant must plan to expedite the evacuation of wounded out of the urban area. Rubble in the streets, barricades, and demolition of roads impede the use of ground ambulances, requiring a heavy reliance on

litter teams. Snipers may present a significant problem for medical evacuation from front line positions. The company casualty collection point (CCP) should be placed in a covered and concealed location with overhead cover (usually a heavy clad building that has not collapsed). The CCP should be located at a point where the field ambulances can reach them, yet close enough to the combat area so that casualties do not have to be carried great distances. Higher numbers of head and chest wounds should be expected, along with increased trauma injuries due to falling objects and glass. Increased casualties may require the stockpiling of medical supplies and augmentation of medical personnel from higher headquarters. The role of combat lifesavers at the company level takes on greater significance. The commander should anticipate increased nonbattle injuries (NBI) due to poor field sanitation or falls from building, as well as contact with TIM. The close nature of urban combat may cause an increased mental health case load. Additional considerations include:

- Marking the CCP. (See Figure L-7.)
- Carrying additional medical supplies to include intravenous (IV) fluids, bandages, poleless litters, SKEDCO litters, and lightweight blankets.
- Planning for aid and litter teams within the assault and support elements and supplying them with sledgehammers, axes, crowbars, ropes, pulleys, and ladders in order to extricate casualties from difficult situations.
- Placing selected combat life savers from the support element under the control of the first sergeant to assist with triage and treatment at the CCP.
- Requesting appropriate medications for nonbattle-related illnesses (for example, dysentery).
- Rehearsing the CASEVAC plan with platoon sergeants. Rehearsals should include company CCP location and marking, CASEVAC routes, priority of CASEVAC, and medical resupply. Aid and litter teams should rehearse carrying techniques based on the nature of the injury.